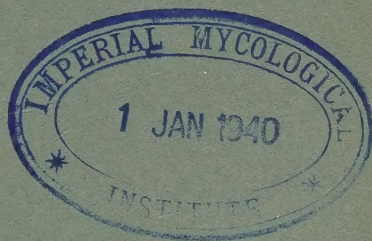
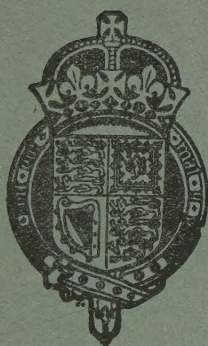


VOLUME XIV

No. 8

GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT
DECEMBER, 1939.



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GOVERNMENT OF NORTHERN IRELAND
MINISTRY OF AGRICULTURE

MONTHLY REPORT

December, 1939

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MINISTRY OF AGRICULTURE

MONTHLY REPORT

DECEMBER, 1939.

Progress with the ploughing up of land for cultivation next spring continues at a rapid pace, and farmers operating on the home front are advancing steadily towards that very laudable object of making this country free and independent of the need for most of the foods imported in peace time. There is plenty of hard work ahead though, and while the latest figures give just cause for optimism it would be foolish to consider any relaxation of effort until all the crops are in the ground. As a further encouragement to the small-holder to do his bit the British Government has announced its intention to amend the scheme of ploughing grants so that a minimum area of one statute acre will qualify. In Northern Ireland, where the proportion of small holdings is very large, this concession will be greatly appreciated, and there should be a ready response to make a further substantial addition to the area already applied for. To use a variation of the original theme, "Farmers should grow more to grow less dependent on imported foods". The benefits that will accrue from a bold and united effort in this direction cannot be over-estimated, but to mention one, which is more likely to be lost sight of in these days of comparative quiet at home, than the many others which concern one's own immediate advantage, is to stress the inestimable value of our heritage, the freedom of the individual, which our fathers and forefathers have striven to preserve for us. This freedom is again in danger, and in these days of economic warfare that symbol of peaceful industry, the plough, can, without being converted into a sword, help to defeat the common enemy as decisively as any lethal weapon however secret.

18th December, 1939.

AGRICULTURAL CONDITIONS.

AGRICULTURAL CONDITIONS AT 1st DECEMBER, 1939.

Unsettled weather conditions prevailed throughout November. A good deal of rain fell, causing heavy land to become waterlogged, and in a few districts flooding resulted from swollen rivers and streams. No serious material damage, however, was reported. Temperatures remained fairly high for the time of year, and there were only a few short spells of frost.

Tillage operations and other seasonal work was generally hindered by the wet conditions, although in some of the drier districts the rains were beneficial in that they softened the lea ground and rendered it more suitable for ploughing. Good progress was made with ploughing and with the carting of farm-yard manure to the fields and, generally speaking, these operations are well advanced for the time of year. There was, however, some delay towards the close of the month, due to the effects of the rains, and when little field work was possible. During this period of enforced inactivity in the fields many farmers turned their attention to the cutting of hedges and other "wet-weather jobs". In the earlier part of November the sowing of winter wheat was continued, but this work was brought to a standstill by the bad weather later in the month.

There is general evidence that farmers are willingly complying with the Tillage Order in the full realisation of the essential need for doing all in their power to bring about a substantial increase in the production of home-grown foods, and so make the country less dependent on imported foodstuffs. Tractors have been kept busy, and tillage operations have been well advanced on many farms, but on some the ploughing of grassland has been delayed in order to take advantage of the good grazing still available on many fields, thus conserving supplies of feeding stuffs as much as possible. It was also reported that, in some districts, agricultural machinery is somewhat limited for the amount of work to be undertaken, but this will be remedied soon.

Well-managed pastures have remained in very good condition, and are still providing much sustenance for cattle, and farmers are taking full advantage of this favourable position by stocking them to the fullest capacity. The heavy rainfall and the recent frosts have, however, had an adverse effect on the pastures, and a general deterioration has now set in.

While the position regarding supplies of seed oats which will be available for next season shows some variation throughout the country, it seems reasonably certain that in most districts the supplies will be sufficient for local

requirements unless farmers are tempted to make too liberal a use of the oats for feeding purposes on account of the shortage of purchased meals. In a few areas, however, it is feared that the local supplies will not be adequate to meet the increased demand, and all farmers are, therefore, urged to conserve their stocks of this and other cereal seeds as much as possible. In this connection it may again be stated as a further reminder to growers that it is best to postpone the threshing of oats and barley intended for seed until nearer seed-time, as grain keeps best in the stack, and to urge farmers who have not seed of their own to make certain of obtaining supplies at an early date.

The position with regard to supplies of phosphatic manures is rather unsatisfactory, basic slag and North African phosphates being difficult to obtain, but supplies of Semsol and of superphosphate are available.

In nearly all districts purchased feeding stuffs were very short last month, and only wheat offals could be obtained in anything like adequate quantities. Prices quoted during November recorded an upward trend. On most farms there are fairly plentiful supplies of home-grown foods, and potatoes, turnips, oats and hay are being used extensively to replace imported concentrates.

The health of cattle and sheep was maintained at a high level throughout November, and the condition of most of the animals was also fairly good, although the wet nights, failing grass and scarcity of hand-feeding, are now being reflected to some extent in a falling off in the condition of forward stores and, in the case of dairy cattle, in reduced milk yields. Breeding stocks are generally being moderately well maintained, but there is a fairly widespread tendency to reduce the dairy herds on account of feeding difficulties, and the tempting prices being offered by shippers. In a few districts there are also some reductions in the cases of sheep and pigs.

The livestock trade improved last month, and both store and beef cattle sold fairly well at seasonally increased prices, whilst dairy cattle remained the brightest feature of the market, and quotations for these reached high levels. Sucker pigs were again a ready trade, and brood sows were also in fair request in most districts.

THE CROPS.

WHEAT.—The bulk of the wheat crop has now been threshed in good condition, and the results both in respect of quality and quantity have been most satisfactory. In some districts few sales of grain have yet been made, but in others it has practically all been purchased by seedsmen at prices of from 9/- to 16/- per cwt. The straw has been selling at from 3/6 to 6/- per cwt. for thatching purposes.

The wet conditions during the greater part of last month prevented much further progress being made with the sowing of winter wheat, but in most areas the work was nearing completion before the weather broke. Wheat sown in September and October is showing an excellent braird, due to the comparatively mild conditions prevailing. Another promising feature is that in the wheat growing districts the acreage already sown shows a substantial increase. Provided favourable weather and soil conditions are experienced in the near future, more land will be sown under winter varieties of wheat. This includes fields that had been under turnips and potatoes, as well as old leas which have been ploughed up recently.

OATS.—A fair proportion of this crop has now been threshed, but the wet weather last month held up the work to a considerable extent. The oats are generally keeping well in stacks and sheds. The yields of grain have so far been fairly satisfactory, and while some of the grain from the earlier threshings showed signs of damage from heating in the stack, the latest reports indicate that the quality of the grain is good and generally up to the usual standard.

With stocks of purchased feeding stuffs limited, farmers are retaining supplies of home-grown oats for feeding to their livestock, and also in preparation for the increased area which they intend to sow with oats next spring. This is reflected in the very small quantities of home-grown oats offered at markets last month, during which prices advanced steadily to appreciably higher levels, the average being $1/3$ above the October figure at $9/4\frac{1}{2}$ d. per cwt.

Oat straw was also dearer and averaged $57/9$ d. per ton.

BARLEY.—Little threshing of barley intended for seed has yet been done, but it seems that the yields will be up to average and the quality of a high standard. Practically no barley has been sold, but quotations of around £13 per ton have been received.

Seed barley will probably be rather scarce, and growers should do their utmost to conserve supplies.

FLAX.—Good progress was made with the scutching of flax, and present reports indicate that the yield and quality of the fibre vary considerably, but taken all over it would appear that the crop is quite satisfactory in both respects, although the proportion of first grade flax is so far small.

Sales last month were effected at the controlled prices, and quotations generally ranged from $12/6$ d. to $15/-$ per stone.

The following were the weekly average prices of flax per stone, weighted on quantities purchased by the Control at the fixed rates, as compared with the prices obtained in the open market a year ago.

1939			1938		
Week ended	s.	d.	Week ended	s.	d.
11th November, ...	13	5	12th November ...	9	3
18th November ...	13	5	19th November ...	9	1½
25th November ...	13	10	26th November ...	9	5
2nd December ...	13	8¾	3rd December ...	9	3¾

HAY.—The threshing of seed hay has been practically completed, and the quality and yields have been good.

Grass seed prices moved rather irregularly last month, and while Italian and mixed seed advanced further to 31/9½d. and 22/3½d. per cwt. respectively, Perennial rye grass seed was cheaper at an average of 15/6¾d. Crested Dogstail was firm in price at 48/10½d. per cwt.

Supplies of meadow and upland hay marketed during November were generally of average quality and, with the demand keen, prices in some instances reached the maximum fixed under the Order dated 29th September, 1939, although the general averages were a shade easier on the month at 97/8d. per ton for upland hay, and 74/- per ton for meadow hay.

MANGELS.—The lifting and storing of mangels have been nearly completed, and as a general rule the roots are of good quality.

TURNIPS.—The crop continued to make slow but steady growth during November, in the absence of severe frosts, and its general condition is very satisfactory, the bulk of the roots being sound, although "raan" disease has been rather prevalent in some areas this season. Crown rot, however, has caused little damage, and the keeping qualities of the roots are expected to be good.

POTATOES.—The lifting of the main crop has now been completed, and the bulk of the tubers are keeping well in storage, although late attacks of blight have resulted in losses among some of the white varieties. On the whole, however, blight was less severe than usual, and the greater proportion of the crop consists of sound tubers.

The demand for ware potatoes for shipment to Great Britain, and for local consumption, remained dull, and supplies are being fed to pigs and other livestock to an increasing extent.

The prices paid for potatoes at market centres during November eased until the last week, when this tendency was arrested and small advances recorded. The average price for all classes of the main crop was 3¾d. lower

at 3/1½d. per cwt., whilst the principal variety, Arran Victory, was 4d. cheaper at 3/2¼d. per cwt. Kerr's Pink and British Queen also sold at easier rates of around 3/- and 3/5½d. per cwt. respectively.

The prices per ton paid to growers by shipping merchants during the week ended 2nd December, 1939, were generally firmer on the week, and ranged as follows:—

Variety		Bagged				Loose			
WARE	Arran Victory	...	£2	5	0 to £2	12	6	£2	5 0
	Arran Banner	...	£2	0	0 to £2	2	6	£2	0 0
	Arran Consul	...	£2	10	0 to £2	12	6		
	Kerr's Pink	...	£2	5	0 to £2	15	0	£2	5 0 to £2 10 0
	Up-to-Date	...	£2	10	0 to £2	12	6	£2	7 6
	Majestic ...	...	£2	5	0 to £2	15	0		
	Gladstone	...	£2	15	0 to £3	0	0		
SEED	Arran Banner	...	£2	10	0 to £3	10	0		
	Arran Pilot	...	£5	5	0 to £5	10	0		
	Champion	...		£4	0	0			
	Up-to-Date	...	£3	15	0 to £4	0	0		
	Majestic ...	...	£3	10	0 to £4	0	0		
	Kerr's Pink	...		£3	5	0			
	Gladstone	...		£4	0	0			

The stocks of seed potatoes are ample throughout Northern Ireland, and there should be no difficulty in meeting the increased demand for seed except perhaps in the case of some of the newer varieties. The attention of potato growers is directed to the recent prices fixed for seed potatoes under Order of the Ministry of Food, dated 4th December, 1939, on page 479.

CABBAGE AND KALE.—These crops made excellent growth, and are now generally in a promising condition. Some fields, however, have not recovered from the set-back caused by the abnormally dry weather earlier in the season, and in some cases kale was a complete failure.

OTHER VEGETABLES.—During the month of November home-grown produce marketed for local consumption was generally firm in price. Supplies of savoys, marketed principally in Belfast and Portadown, realised from 1/- to 2/- per dozen, and the average monthly price was reduced by 1½d. to 1/4½d. per dozen. Cabbage prices ranged from 9d. to 1/8d. per dozen, averaging 1/3¼d., a decrease of ¼d. over the month, whilst cauliflowers were 2¼d. dearer on the month at an average price of 2/- per dozen. Leeks fetched from 3d. to 1/- per bunch, and on average were ¾d. above the October price, but parsley prices, which ranged from 2d. to 6d. per bunch and averaged 3¼d., decreased by 1½d. per bunch. Carrots also were 2d. cheaper at 5d. per bunch, but parsnips and garden turnips firmed in price and ranged from 5d. to 7d. and 5d. to 8d. per bunch respectively.

FRUIT.

APPLES.—Home-grown apples at Belfast market remained in plentiful supply during November, but trade continued dull at previous prices. The principal culinary variety, Bramley's Seedling, realised from 5/- to 10/- per ten stone barrel for best samples, with lower grades selling at from 4/6d. upwards. Quotations for dessert varieties such as Kemps fetched around 8/- per ten stone barrel, while lower grades of this variety were quoted at from 4/- upwards. Other varieties and lower-grade produce sold at from 3/- upwards.

TOMATOES.—Home-grown tomatoes were available at firmer rates varying from 7/6d. to 10/- per twelve lb. for top quality produce.

LIVE STOCK.

CATTLE.—Store cattle were maintained in a good healthy condition, but on many farms the outliers have suffered to some extent from colder and damper conditions, in conjunction with the deterioration in the pastures. The comparative freedom of the herds from outbreaks of disease or other causes of ill-health, and the general absence of such seasonal complaints as "hoose" are attributed by many stock owners to the increased applications of lime to pastures in recent years facilitated by the terms of the Government Subsidy Scheme.

Trade in store cattle was rather dull in the early part of November, but towards the close of the month a firmer tone was noticeable, and the best forward animals cleared readily at prices showing an upward tendency. Young stores and inferior types, however, remained in dull request at unchanged to easier rates.

The season for grass fattening is now practically over, and the cattle remaining on grass are being carried on as stores. These generally are in good condition. It is reported that fewer cattle are being stall-fed than is usually the case at this time of year on account of the necessity to practise economy in the use of feeding stuffs.

Beef cattle at fairs and markets last month were in firm request, and prices exhibited a seasonal upward trend.

The health of dairy cattle remained good, and calving proceeded normally during November. The shortage of cakes and meals is, however, reflected in some falling off both in condition and in milk yields.

Trade for dairy cattle remained very brisk, and prices continued to move to higher levels. Many of the best animals were bought for shipment to Great Britain.

SHEEP.—The condition of the flocks during November was well maintained, and disease caused less trouble than usual, outbreaks of "liver fluke" and "foot rot" being comparatively rare. The health of the breeding ewes appears to be normal, and in some districts lambs are expected soon.

Business in fat sheep improved during last month, and price movements favoured sellers.

PIGS.—Young pigs were in ready request at fairs held during November, and prices were firm to dearer on the month. Some farmers were inclined to dispose of their breeding sows on account of the scarcity of feeding stuffs, but this tendency was by no means general, and many breeders paid high prices for good animals. Steady supplies of pork were readily bought up at the controlled prices.

POULTRY.—With the approach of the Christmas season trade showed increasing activity, especially towards the end of November, and this was reflected in the firmer trend in prices for most classes. The average prices per head for birds sold alive during November were: Chickens $2/3\frac{1}{2}$ d., an increase of $1\frac{1}{4}$ d. on the month; hens $1/7\frac{1}{2}$ d., or an increase of $1\frac{1}{2}$ d.; and ducks $2/3$ d., or a decrease of $2\frac{1}{4}$ d. The live weight prices per lb. for poultry sold during the month were: Chickens, large, $7\frac{1}{2}$ d. to 9d., medium 7d. to $7\frac{1}{2}$ d., and small 6d. to 7d.; hens $4\frac{1}{2}$ d. to 5d.; ducks 5d. to $6\frac{1}{2}$ d.; turkeys 9d. to $1/3$ d., and geese 5d. to 7d.

As mentioned in the previous issue of this report, the prospects for the coming Christmas trade in poultry are promising for the producer, with competition from foreign sources of supply being considerably reduced. So far, however, there has been nothing unusual to report, except that prices have ruled well above those of a year ago. The following were the prices per lb. live weight for turkeys and geese during the past few weeks, with the quotations for the corresponding weeks in 1938 shown in brackets:—

Week ended		Turkeys	Geese	Large Chickens
18th November, 1939	...	10d. to 1/- (9d. to 10d.)	5d. to $5\frac{1}{2}$ d. ($4\frac{1}{2}$ d.)	8d. ($6\frac{1}{2}$ d. to $7\frac{1}{2}$ d.)
25th November, 1939	...	11d. to $1/2$ (9d. to 10d.)	5d. to 6d. ($4\frac{1}{2}$ d.)	8d. ($7\frac{1}{2}$ d. to $8\frac{1}{2}$ d.)
2nd December, 1939	...	11d. to $1/3$ (9d. to 10d.)	6d. to 7d. ($4\frac{1}{2}$ d. to 5d.)	8d. to 9d. ($7\frac{1}{2}$ d. to $8\frac{1}{2}$ d.)
9th December, 1939	...	11d. to $1/3$ (9d. to 10d.)	6d. to 7d. (5d.)	8d. to 9d. ($7\frac{1}{2}$ d. to 9d.)
16th December, 1939	...	(1/- to $1/6$) (9d. to 10d.)	(5d. to $8\frac{1}{2}$ d.) (5d. to $5\frac{1}{2}$ d.)	($8\frac{1}{2}$ d. to 9d.) (9d. to $9\frac{1}{2}$ d.)

It should be realised that whilst these prices are well above those for last year, the costs of production this year have justified the general increase, and that the likelihood of an abnormal rise in prices later, which would tend to create the impression of profiteering, may be defeated by the vigilance of the

consumer, whose reaction will be to forego the luxury of a turkey this Christmas in favour of more reasonably priced meats, and with these foods still unrationed, this will entail no sacrifice, but may mean a loss to the poultry trade.

HORSES.—The horse trade was rather variable last month; in some districts good working horses were in very keen request, while in others the demand was slack, as farmers are relying to an increasing extent on tractors. As a rule, however, improved prices were maintained, and the general ranges were:—Good young horses, £25 to £70; older horses, £12 to £38; unbroken colts, £12 to £40; and foals under a year old, £9 to £26 per head.

DAIRY PRODUCE.

MILK.—The dearth of good meal mixtures resulted in a further considerable decrease in the milk yields last month, and although the comparatively mild weather and good pasture counteracted this to some extent, the supplies to creameries were generally appreciably below normal. The prices paid to producers for milk delivered at the creameries during November were firmer at from 4½d. to 6½d. per gallon, the separated milk being returned to the farmer.

The rate of equalisation payment for milk produced in Northern Ireland and delivered to the creameries for manufacturing purposes has been determined at 0.40d. per gallon for the month of October, 1939, in accordance with the Milk and Milk Products Acts (Northern Ireland), 1934 to 1938.

It should be noted that under the regulations creameries are required to distribute the equalisation payment in accordance with the butter-fat content of the milk received from each supplier.

FARM BUTTER.—For the supplies offered at markets in Northern Ireland during November prices advanced further, the average price of print butter firming by ¾d. to 1/5d. per lb., and that for lump butter by 1d. to 1/3½d. per lb. The general price ranges were: 1/2d. to 1/7d. per lb. for farmers' print butter, and 10½d. to 1/5d. per lb. for lump.

EGGS.—Prices for hen and duck eggs, as fixed by the Ministry of Agriculture from week to week, advanced further during November. A table of egg prices showing the prices ruling during the five weeks ended 2nd December, 1939, together with comparative figures for 1938, appears on page 472 of this report. The maximum wholesale and retail prices, as fixed by the Ministry of Food, which have been in operation since the 6th November, are also included on page 473.

THE PLOUGHING-UP CAMPAIGN.

HALF-WAY STAGE PASSED.

It was announced in the Press and over the wireless at the beginning of the month that applications made to the Ministry up to that time for the ploughing grant of £2 per statute acre represented an area in excess of 100,000 acres. It is now most gratifying to record that applications received by the Ministry for grants for ploughing up land that has been 7 years or more under grass account for an area in excess of half that aimed at in the campaign for increased tillage of some 250,000 acres. Actually up to 18th December the area was 131,052 acres, in respect of 22,725 applications, or an average of 5.77 acres per applicant. Payments of the grant have been steadily issuing from the Ministry's offices, and already some £4,000 has been paid to applicants who have fulfilled the requirements of the Scheme.

The Ministry will continue to pay the grant as soon as notification that ploughing has been completed is received. The sooner the ploughing is done, therefore, the sooner can payment of the grant be made to the farmer. The payment of money in this way should be of particular benefit to the farmer at a time when he will have added calls for expenditure on fertilisers, seeds, etc., for the additional land which will be under cultivation in 1940. Apart from this aspect, however, there is the most important point which should be kept constantly in mind, of ploughing up more land as soon as possible, not only for the grant, but all other land as well. The work which this involves should therefore, be pushed ahead with all speed, so that all the resources of the farm as regards labour, horses and tractors shall be available to undertake the work of sowing and planting when the time for those operations arrives. It would be a grave mistake to postpone ploughing now and to have it as an added work in the spring when the men, horses and tractors should be engaged on more seasonal work.

The Ministry continues to receive a very large volume of correspondence incidental to this Scheme, and steps have been taken to deal with would-be correspondents in a general way, so as to reduce the number of enquiries to the minimum, and so release staff engaged on this work for the more important work of dealing expeditiously with the claims. The following points have been covered in this general reminder, and it is felt that their re-statement in this issue would not be amiss.

(1) The latest date for ploughing up grassland is the 31st March next, and in all cases a form of application must be sent to the Ministry and the ploughing completed before that date.

(2) The grant is payable to the person at whose expense the land has been ploughed or otherwise broken up, and brought into a state of cleanliness and fertility for the sowing of an approved crop in 1940. In short, under ordinary circumstances the person who is going to cultivate the land should apply for the grant irrespective of whether he is the owner of the land or has rented it in conacre.

(3) When a farmer has applied for the grant on the buff-coloured form he will receive from the Ministry a post card acknowledging the receipt of his application, and at the same time informing him that he may commence ploughing. Farmers should, therefore, make arrangement to commence ploughing as soon as they have applied for the grant.

(4) When a farmer has completed ploughing he should notify the Ministry without delay so that arrangements may be made for the final inspection of the work and payment of the grant expedited.

(5) Finally, farmers are asked to read the instructions on the back of the application form carefully so as to reduce the number of enquiries to a minimum, and it is also requested that farmers should read the post card acknowledging the receipt of their applications, and conveying the necessary authority for them to commence ploughing, as it would appear from the number of letters received on this point that the necessary authority as stated on the post card has been overlooked.

AMENDMENT OF THE SCHEME OF PLOUGHING GRANTS.

ONE ACRE TO QUALIFY FOR THE GRANT.

It was announced by the Minister of Agriculture and Fisheries, in the British House of Commons, on the 7th December, that steps will be taken to amend the Scheme so as to reduce the minimum area which would qualify for the grant from two statute acres to one statute acre. This is being done in order to allow the very large number of small farmers and poultry keepers to obtain a share in the financial benefit, and so encourage increased production of food stuffs for the upkeep of livestock, including poultry. It is felt that poultry keepers in Northern Ireland will benefit appreciably from this concession, as they will thus be enabled to grow more food for the upkeep of their flocks and become much less dependent on purchased feeding stuffs. Incidentally, as mentioned in the article on "Poultry in Wartime" on page 459 the ploughing up of stale land on which poultry has been run in past seasons will be of great benefit in that it will freshen the ground and thereby assist in preventing outbreaks of diseases and infestations of parasites amongst the birds.

This Amendment to the Act governing the Scheme will require Parliamentary sanction, and steps are being taken to make it effective at an early date.

THE TILLAGE (NORTHERN IRELAND) GENERAL (No. 1) ORDER, 1939.

There is an impression among some farmers that because they have been using their land for certain purposes, such as the grazing of milch cows, they are automatically relieved of their obligation to comply with the provisions of the Tillage Order. This impression is entirely erroneous, and the Ministry desires to emphasise that the Order applies to every holding which contains 10 acres or more of arable land, unless in some exceptional cases where the holdings, or parts of them, are specially exempted by the Ministry. Such exemptions are granted only where application is made to the Ministry in writing, and where the Ministry is satisfied that the cultivation of the holding would be of less service to the community than if the holding were used in some other way.

It was also announced at a later date that it was proposed to continue the scheme for another year.

FREE SOIL ANALYSIS FOR FARMERS.

Farmers are reminded that the Ministry of Agriculture maintains a Soil Advisory Service whereby farmers can have soils analysed free of charge.

Under present conditions many cases will arise in which there will be considerable doubt as to the requirements of fields for lime and manures. In these cases the surest way is to have the soil analysed.

Numerous cases have occurred recently in which soil analyses have been of great practical help to farmers, enabling them to make the best use of manures, both on grass and arable land.

The soils in Northern Ireland are, in general, deficient in lime, and many farmers are now making good their shortage because the Land Fertility Scheme enables them to buy lime at half price. A soil analysis will ensure that this lime is applied to the fields which need it most, and on which it will give the greatest economic return.

Farmers should not take their own soil samples, but should apply, stating the number of fields they wish to have analysed, to:

The County War Agricultural Executive Officer, or
The Area Officer for the district.

Arrangements have been made whereby soil samples, from any part of the country, will be collected and analysed and reports sent to farmers in the shortest possible time.

TRACTORS.

The Fordson tractors and tractor ploughs, supplied to the Ministry by the Imperial Government, which were referred to in the November issue, are now being distributed to farmers through tractor agents. In accordance with the policy previously announced, these tractors can only be sold either to persons residing in districts where tractors are needed, or to those who will operate the machines in such districts. By this method it is hoped to provide facilities for ploughing and harvesting corn crops throughout Northern Ireland. In addition to the Ministry's tractors, others are being imported and sold in the ordinary way by tractor agents. The Ministry's hire purchase scheme has proved of much assistance to farmers in the purchase of tractors and tractor ploughs.

The following paragraph, which appeared in the November issue, is of such importance that its repetition is justifiable:—

“Farmers are again reminded that if ploughing is delayed until spring, tractor owners may not be able to cope with the demand for their services. Again, the work may be held up by bad weather. It is important, therefore, that ploughing should be pushed forward now in order that the extra acreage may be ready for sowing when seed time arrives.”

It is also urged that orders should be placed with implement merchants now, not only for implements for spring cultivations, but also for harvesting machinery, binder twine and threshing machines. Only by this means will it be possible to ensure that supplies will be available when required.

POULTRY IN WAR TIME.

Most poultry keepers, and especially those who are largely dependent on purchased foods, are concerned about the prospects of maintaining their flocks at peace-time level. They wonder if the flocks should be reduced; they ask if chickens should be hatched in the same number as formerly, and they seek information about the feeding of the birds under present conditions.

It must be realised that in a country where so much dependence is placed on imported feeding stuffs there will be inevitable and unavoidable disorganisation in the importation and distribution of foods during times of abnormal trading conditions, such as those which exist at present.

This disorganisation, however, is a passing phase, and past experience during similar occurrences showed that when the initial difficulties were overcome conditions returned to a more or less normal state. There is no reason to doubt that such will not be the case in the present emergency.

At the same time it must be understood by poultry keepers that they need not expect to be able to obtain supplies of all the kinds of imported foods which were available in peace time, or to obtain the full peace time quota of those which are available. This should not deter them from carrying on with poultry work, but it makes it essential for them to plan for the future, to conserve food as much as possible, and to organise and manage the undertaking in such a way as to meet the new conditions.

During the last war the numbers of ordinary poultry in Northern Ireland remained remarkably constant throughout the period of hostilities, and there was only a very small decline, from 5,475,459 in 1914 to 4,830,083 in 1918, or 11.8 per cent. At 1st June of this year the number of ordinary poultry in Northern Ireland was 9,295,444. This is 69.8 per cent. more than in 1914 and 92.4 per cent. more than in 1918. This very large increase, together with the fact that the tendency in recent years has been to depend more and more on imported feeding stuffs and less on potatoes and other home-grown produce, makes it evident that the poultry requirements for purchased feeding stuffs are now much greater than during the period 1914 to 1918. Poultry keepers should appreciate this fact and not assume, as a matter of course, that supplies of purchased feeding stuffs will be forthcoming in sufficient quantity to meet the full requirements of the increased numbers of poultry, or to take the place of home-produced foods to the same extent as in recent years.

It is fortunate that in Northern Ireland practically all the poultry are kept on general farms. This means that poultry keeping is not a specialised undertaking, but a branch of other farm activities. It should, therefore, be comparatively easy to make the poultry largely independent of purchased foods by growing and producing the foods on the farm. The proper course to adopt, therefore, to meet the new conditions is not to reduce the stocks drastically but to produce more food for the birds.

This is a sound practice, even if the question of food supply is not a reason for it, as it will freshen the ground and make it more suitable for the birds, thus assisting in the fight against diseases and parasites, which are the bane of the poultry keeper, and which are perpetuated and spread by dirty, stale ground.

Apart from the fact that the combination of farming and poultry keeping places Northern Ireland in a favourable position to meet the new conditions, there are other factors in the economy of farming as usually practised here which will help still further. Oats and potatoes are the principal crops grown, and both are very suitable foods for poultry. Fed whole as a grain ration, and included in a mash in the ground form, oats provide the basis of

rations for poultry of all ages. Where oats are available the poultry will never be hungry and never ill-nourished. Potatoes are also a valuable food for poultry in suitable proportion and the one-time general practice of including potatoes in the ration should be resumed now. Potatoes are cheap, palatable and nutritious, and are relished by all classes of poultry. They should always be fed in the cooked state. There is a very low limit to the extent to which roots such as turnips can be included in poultry rations, and it is better to restrict their use to the giving of an occasional root to the poultry to peck in the raw state.

In districts where creameries are established the poultry keeper is further favoured by having a supply of separated milk, which is the most valuable of all foods for poultry, and one which will fully supply their needs for protein. In view of the disorganisation in the supplies of meals containing a high proportion of protein, those who have a surplus of separated milk are extremely fortunate. Similarly, those who make butter at home and have supplies of buttermilk are in an equally fortunate position, as buttermilk is also a valuable food for all classes of poultry.

In conjunction with the growing and producing at home of more food for the poultry, consideration will have to be given to the management of the birds and to the system under which they are kept. In recent years the practice of rearing chickens intensively indoors during the early weeks of life has become fairly general and, under normal conditions, such a practice may be satisfactory. As, however, it necessitates the providing of all the nutritional essentials, including Vitamin D, in the food fed to the birds, it may not be suitable under present circumstances. If cod liver oil, which is the usual source of Vitamin D, is not included in the food the chickens will not thrive if kept indoors. When chickens are allowed out from an early age on fresh grassland, even for a few hours daily on fine days, they will obtain some of their requirements, including Vitamin D; so, under such conditions, it will not be so difficult to keep them in a thriving state as it would be under intensive conditions if all their requirements are not being supplied in their food.

The practice of keeping laying birds indoors has also been followed in many instances. Here again, great care is necessary to ensure that all the nutritional requirements of the birds are supplied in the food, since they cannot obtain any of them themselves. If it is not possible to meet these requirements in full, because of present conditions, the practice should be discontinued and the birds allowed out daily to range on fresh grassland. Birds kept indoors and not given an adequate supply of yellow maize meal or fresh greens, will produce eggs having pale-coloured yolks and, besides, their general health and condition will be impaired. Therefore, the birds should be allowed out and given an opportunity to find some of their own food. This practice not only keeps the birds in better health, but is also an aid to economy

as it saves food and reduces the cost of producing eggs. As well, the birds are manuring the grassland over which they are ranging, and thus are assisting the farmer to produce more food for other kinds of stock, such as sheep.

The practice of feeding dry mash, also a development since the last war, is essentially a peace-time one and cannot be advised during times when economies have to be made. It is wasteful, and it does not lend itself to modifications consequent on the desirability to use potatoes, house-scrap, vegetables, and perhaps kinds of meals which the birds have not been accustomed to eat. For example, it may be possible to get supplies of palm kernel meal, but this meal in dry mash mixture might not be eaten. Palm kernel meal is a useful source of protein, and about 10 per cent. of it in a mixture of meals to be fed with boiled potatoes, scraps, etc., would help appreciably in raising the protein content of the ration, if other sources of protein were not available.

Wet mash feeding is now recommended. This system is economical of food, it enables the poultry keeper to ration the birds as he desires, it permits of potatoes and other vegetables being incorporated in the food, it ensures that the best possible use is being made of the meals available, and it enables foods which are not palatable in the raw dry state being used.

The feeding of poultry—both young and older birds—will have to be considered in relation to the prevailing conditions, and every effort made to make the farm as self-supporting as possible as regards supplies of food. To this end, poultry keepers should arrange for the growing of oats, barley, a little wheat, potatoes, and greens such as kale, on the home farm or on land taken for that purpose on the conacre or eleven months' system, if land on the home farm is not available. It would be a mistake for a poultry keeper to depend on somebody else for a supply of an essential food like oats, as if such is done he may be disappointed in getting supplies as and when they are required, besides having to pay far more for them than they would cost if grown on the home farm.

The prevention of waste in the use of food is as important as the actual kinds of foods to feed. Nothing should be left undone which will help in obtaining the best possible results from the food fed to the birds, and also in seeing that food is not wasted by feeding it to unprofitable birds, unnecessary birds, birds of the air, and rats and other vermin.

Under present conditions the thorough culling of all poultry flocks is imperative. There should not be left on any farm any bird which is not likely to give a reasonable return for the food eaten. This applies to birds of all ages—from the time of hatching until the useful age of the bird is past. Many poultry keepers are wondering if they should reduce the breeding stock. The course to adopt is to reduce the number by culling out all birds which,

in any way, are not up to a good standard of type and quality. If all the birds are up to that standard they should be retained, as it would be a grave mistake to deplete farms of good breeding stock which must be the foundation of future flocks throughout the country.

Similarly with the flocks of pullets which are kept for laying. Even in normal times the systematic culling of such flocks to remove any birds which are not giving a reasonable return for the food consumed is an essential routine practice in the programme of management to obtain profitable egg production; under present circumstances the retention of unprofitable and unthrifty birds in a flock is evidence not only of bad management but of a lack of patriotism. Food should not be wasted by giving it to unproductive birds, nor should the profits from the good birds be used to maintain the bad ones. Every flock should be rigorously culled, and no birds retained except those which justify retention. By doing this the best possible use will be made of the supplies of foods available, the egg production per ton of meals consumed will be maintained at the highest possible level, the costs of production will be lowered and the maximum profits obtained.

The tragedy of killing off good birds will not be necessary if all the culls are removed from the flocks of the country and killed. It is the number of good birds that is left in the country and not the total poultry population that is important, and the poultry industry would gain rather than lose if the total number of poultry were reduced by the culling out of all unprofitable and unthrifty birds.

From the foregoing it is seen that the policy should be to concentrate on quality rather than quantity, and the same principle applies in the case of hatching operations during this hatching season. Greater care than ever should be taken to ensure that the eggs to be hatched are from sound, healthy stock, likely to breed profitable pullets. Breeding from pullets or from otherwise unsuitable stock birds should not be attempted. The number of chickens to be hatched will depend on circumstances in individual cases, but there does not seem to be any justification for drastically curtailing the hatching programme where the intention is to obtain pullets for egg production next season. Such an objective should receive prior consideration, and the hatching of chickens for table purposes curtailed or suspended. The hatching should be spread well over the period from December to April so as to avoid requiring sudden increases in supplies of food. Although in the early stages of chickenhood the consumption of food is small, birds of 8 weeks old and over consume a considerable quantity, but if they are kept on free range they will find much of their needs themselves, especially from April onwards, when insect life revives and fresh growth in the grass appears. This suggests that it might be an advantage to postpone the main hatching operations until, say, February or March, but in opposition to that suggestion

must be weighed the possibility that a general postponement of hatching until that time might mean an added difficulty of obtaining sufficient chicken-rearing foods when the sudden demand for increased quantities would arise; and also the fact that later hatched pullets will not come into production until the after-part of the season during which egg prices are high is over. There seems definitely to be no justification for departing from the general advice to hatch heavy breeds before April, and light breeds before May, so as to get pullets which will lay during the following autumn and winter. It is considered that the best policy is to hatch a proportion of the chickens each month from now until April.

The chicken flocks should be culled constantly and all unthrifty specimens removed and killed. Where a sex-linked cross is used, or the chickens are sexed as day olds, it may be a good policy to kill off the cockerel chicks rather than rear them. This is preferable to reducing the hatching, because of the difficulty of obtaining food for the chickens already hatched. Where the cockerel chicks are reared they should be sold off at the earliest possible moment, and none retained on the farm except possibly a limited number which show promise of developing into good stock birds.

As already emphasised, the rearing methods should aim at allowing the chickens out early in life and giving them every opportunity of finding some of their food themselves. For successful rearing under intensive conditions the use of cod liver oil as a substitute for sunlight to supply Vitamin D is essential. The supplies of cod liver oil may be less than normal, and poultry keepers should keep this in view and change back to natural methods of rearing whereby the chickens are allowed out at an early age and given the advantage of light and sunshine on fine days. By so doing, the use of cod liver oil is not essential.

It may not be possible always to get the ingredients to make up chicken rearing mashes according to the formulae recommended by the Ministry, but it is expected that supplies of foods which, along with the home-produced foods, will make satisfactory rations for chickens, will be available. Bran, pollard, cracked oats and milk are suitable foods for chickens, and a little cooked potatoes can be added when the birds are about four weeks old. Bran is a particularly useful food for young chickens, and when mixed with a little pinhead oatmeal (or cracked oats when the birds are two weeks old) and the mixture damped with separated milk, it will supply the requirements of the birds, especially if they are allowed out occasionally on fresh grass. If milk is not available a little meat meal or protein meal should be added to the bran and oatmeal mixture. If maize meal can be had, a little could also be added, but this is not absolutely essential.

As the chickens grow older whole oats or crushed oats may be fed, and the mash may consist of a mixture of bran, pollard, ground oats, cooked

potatoes and separated milk, or meat meal if the milk is not available. Pullets which are three months old and over should be run on fresh, clean pasture, and will not require any milk or meat meal.

RATIONS FOR HENS.—The best substitute for cereals is potatoes. Cooked potatoes have a feeding value of about one-quarter that of a mixture of cereals so that 4 lb. cooked potatoes is equivalent to 1lb. of cereals. Boiled potatoes may form from 25 to 30 per cent. by measure of the total ration, the balance being made up of a mixture of bran, pollard, and ground oats, with a little meat meal, palm kernel meal, or earthnut meal.

The following is the type of ration advised :—

Parts by Measure.

1 boiled potatoes
1 bran
1 pollard
1 ground oats
 $\frac{1}{2}$ meat meal, earthnut meal or palm kernel meal.

The potatoes should be pounded up with the meals without adding any liquid, and the mixture fed while freshly made. Not more than will be used in one day of a mixture containing palm kernel meal should be made up at one time, as this meal has a tendency to become sour and unpalatable after being damped for some time.

A suitable system of feeding would be :—

Morning : A feed of oats scattered in the litter of the house. After this has been cleared up the birds should be allowed out on fresh grass range or alternatively given a feed of fresh greens such as turnip tops, cabbage or kale at mid-day.

Afternoon : Wet mash, as much as the birds will clear up in about 20 minutes.

Evening : A small feed of oats in a trough in the house.

It must be realised that while such feeding will maintain the birds in good condition and health, it may not enable them to lay so well as they would if fed on more concentrated rations, but the policy should be to maintain the flocks and to be satisfied with reasonably good production rather than maximum production. The feeding, as outlined above, will not be nearly so costly as a standard laying mash, so that it is possible with the war-time rations to make equally good profits as in peace time, even though egg production is not quite up to the standard obtained in normal times.

FEEDING STUFFS SUPPLIES.

NOTE ON THE PREPARATION OF MIXTURES.

The Ministry has received a number of enquiries regarding the revocation of the General Licence, dated 21st November, which authorised all licensed merchants to prepare compound cakes, compound meals or mixed meals for sale.

First of all it should be emphasised that the licences issued to merchants to buy and sell feeding stuffs remain in force. Secondly, the General Licence of November 21st has been replaced by a special licence, and only those merchants in Northern Ireland in possession of this special licence are able to prepare compound cakes and meals or mixed meals for sale.

According to the terms of this licence no mixtures other than those specified in the schedule can be prepared; twenty-five per cent. by weight of the total quantity prepared must be in the form of the mixture suitable for dairy cows. Other mixtures which can be prepared are for fattening pigs, for young pigs, and for young chickens. All must be prepared according to the formulae set out in the schedule. For instance, the ration for dairy cows will be made up from the customary ingredients, and must contain a minimum of eighteen per cent. of crude protein. The other mixtures must also conform both as regards ingredients and analysis to the specifications set out in the schedule of the licence.

It will be seen that no provision has been made for the preparation of a special poultry-laying mash, but it should be clearly understood, however, that the absence of such a mash does not mean that there will be no feeding-stuffs available for poultry. Provender millers and merchants are at complete liberty to sell individual feedingstuffs to poultry keepers and others who will be able to prepare their own mixtures on the basis of the ingredients available. The object of these measures is, firstly, to secure that dairy cows will have first call on supplies of high protein foods, and secondly, to ensure that only rations which are properly "balanced" will be sold to farmers. If feeding-stuffs cannot be made up into the approved mixtures, the Ministry feels that it is preferable that they should be sold in the form of individual meals so that farmers will know exactly what they are buying.

MARKETING SCHEMES AND ENACTMENTS.

PIG PRICES (8th--30th NOVEMBER, 1939).

An Order entitled the Pigs (Provisional Prices) (Northern Ireland) Order, 1939, made under Regulation 55 of the Defence Regulations, 1939, provided that as from the 8th November, 1939, no person in Northern Ireland should sell, or agree to sell, or offer or expose for sale, or buy or agree to buy or offer to buy, any pig for slaughter or curing except at the prices quoted below.

					Fixed Prices per dead cwt.
Pigs other than Sows, Rigs, Stags and Boars—					
	Weighing up to c.1.2.2 dead weight	...	...	...	84/-
	Weighing from c.1.2.3—c.2.0.0	...	...	...	79/6
	Weighing over 2 cwt.	...	...	...	75/3
Sows	...	...	...	...	58/4
Rigs	...	...	...	...	72/9
Stags	...	...	...	...	50/5
Boars	...	...	...	...	28/-

The authorised deductions are as follows :—

Pigs Marketing Board administrative levy, 8d. per pig.

Insurance deduction to cover insurance, in the event of a carcase being condemned as unfit for human consumption, 4d. per pig in the case of dead pigs, and 7d. per pig in the case of live pigs.

These prices are for delivery at a market or live pig collecting depot, or a railway station, as arranged between the buyer and seller. If live pigs are delivered by the seller to the buyer otherwise than as aforesaid the price of each pig shall be increased by any sum actually paid by the seller for any such delivery by rail, or, where no part of such delivery is by rail, the sum of 8d. per pig.

The above prices were in operation until 30th November, 1939, when they were revoked by the Order quoted in the following Ministry of Food Announcement.

CONTROL OF MEAT AND LIVESTOCK.

As announced by Mr. Morrison in the House of Commons on 30th November, the arrangements for the control of the marketing of livestock and the distribution of home-killed meat have been reviewed. The introduction of full control has been postponed until January.

Meanwhile the Fatstock, Home-killed Pork, Meat and Pigs (Provisional Prices) (Revocation) Order, 1939, has been made. This Order revokes completely—

The Fatstock (Provisional Prices) (No. 2) Order, 1939.

The Pigs (Provisional Prices) Order, 1939.

*The Pigs (Provisional Prices) (Northern Ireland) Order, 1939.

The Home-killed Pork (Provisional Prices) Order, 1939.

The Order also revokes the Meat (Provisional Prices) Order, 1939, and the Meat (Provisional Prices) (No. 2) Order, 1939, except as regards chilled and frozen meat.

As a result it is not now compulsory for fatstock to be sold in livestock markets, and the prices prescribed for fatstock and pigs no longer apply. The wholesale and retail prices of fresh meat including pork, are freed from control, but the prices of imported meat, both wholesale and retail, remain unchanged.

The Order applies to Northern Ireland as well as to Great Britain.

The date on which control will be resumed will be announced in due course.

*Northern Ireland Pig Prices Fixed (4th December, 1939).

A Determination has been made by the Pig Industry Council for Northern Ireland in exercise of their powers under Section Five of the Agricultural Marketing (Pig Industry) Act (Northern Ireland), 1934. The approval of the Ministry of Agriculture has been given to this Determination which provides that on and from the 4th December, 1939, until further notice, pigs sold by a producer shall be sold at the following prices:—

I. Pigs sold alive (other than pigs specified in III. below).

Weighing	c.1.0.0 to c.1.2.2 ...	...	90/- per dead cwt.
„	c.1.2.3 to c.2.0.0 ...	...	85/- „
„	c.2.0.1 to c.2.0.14	...	81/- „

II. Pigs sold dead (other than pigs specified in III. below).

Weighing	c.1.0.0 to c.1.2.2	...	...	84/-	per dead cwt.
"	c.1.2.3 to c.2.0.0	...	...	79/6	"
"	c.2.0.1 to c.2.0.14	...	...	75/3	"

III. Live or dead	Sows	...	...	58/4	per dead cwt.
"	Rigs	...	...	72/9	"
"	Stags	...	...	50/5	"
"	Boars	...	...	28/-	"

Provided always that the value of a pig of any weight which is not a sow, rig, stag or boar, shall not be less than the value of a pig of lesser weight sold in the same manner.

There shall be no fixed prices in the following cases :—

- (a) Emaciated or screw pigs.
- (b) Smelling pig carcases with definite indications of putrefaction.
- (c) Pigs visibly diagnosable as diseased before despatch by the producer and subsequently condemned.
- (d) Pigs weighing less than c.1.0.0, or more than c.2.0.14 dead weight (other than pigs specified in III above).

The decision as to whether a pig falls within Category (a), (b), or (c) shall lie solely with the Veterinary Officer of the Ministry of Agriculture for Northern Ireland, who shall give a certificate in writing accordingly. Category (b) shall have effect only in regard to pigs sold dead.

REDUCTIONS FOR DAMAGE.—In the case of pigs sold dead, the following reductions in value may be made for damage certified in writing by a Veterinary Officer of the Ministry of Agriculture for Northern Ireland :

Broken Ham (dry, shank and/or shell bone break)	5%	of the value of the carcase.
Broken Ham (wet break)	...	12½% " "
Shoulder stuck carcase	...	3/- per shoulder affected.

The fixed prices are for delivery at a market or a railway station as arranged between the buyer and seller. If live pigs are delivered by the seller to the buyer otherwise than as aforesaid, the price of each pig shall be increased by any sum actually paid by the seller for any such delivery by rail, or where no part of such delivery is by rail, the sum of 8d. per pig. Where a producer delivers dead pigs to a curer's store which is not convenient to the producer's

country delivery point, the curer shall pay all the transport charges incurred by the producer, unless it has been the custom for the producer to deliver his dead pigs at the curer's store.

The authorised deductions at present in force will continue to be made.

SALES OF LIVESTOCK IN GREAT BRITAIN.

The following maximum prices, as fixed by the Ministry of Food, were in operation during November.

Fat Cattle

(1)	Quality standard, 57 per cent. and over	...	48/-	per live cwt.
(2)	Quality standard, 54 to 56 per cent.	...	44/-	"
(3)	Ordinary Standard, 57 per cent. and over	...	44/-	"
(4)	Ordinary standard, 54 to 56 per cent.	...	40/-	"
(5)	Other cattle, 53 per cent. and under	...	37/-	"

Lambs ... 11½d. per lb. estimated dressed carcase weight.

Sheep ... 10d. " " "

Ewes and Rams ... 6d. " " "

Pigs ... 15/- per score up to 10 score.
14/6 per score above that weight.

The above prices were revoked on 30th November, 1939, by the Order made by the Ministry of Food and printed on page 468 of this Report. It should be noted, however, that the arrangements for the payment of the Cattle Subsidy still obtain.

BACON INDUSTRY ACT (NORTHERN IRELAND), 1939. GRADING STATISTICS.

DEAD PIGS.

Table showing the percentages of pig carcasses for the Roll and Ham cure within the weight and grade classes indicated from 1st to 26th September, 1939.

Under c.1.0.21		c.1.0.21 to c.1.1.13					c.1.1.14 to c.1.2.3					
Suitable	Un-suitable	Grade A	Grade B	Grade C	U.L. & U.F.	U.	Grade A	Grade B	Grade C	U.L. & U.F.	U.	Totals
.53	.09	1.69	.65	.22	.15	.01	4.63	3.52	1.63	.69	.02	13.83
Grade A.				Grade B.				Grade C.				
1	2	3	4	1	2	3	4	1	2	3	4	
7.96	22.63	4.10	.85	5.15	21.78	5.81	1.73	1.57	8.24	1.81	.51	82.14

Ungraded Carcasses.

Under Grade A measurements. U.L.	Over Grade C measurements U.F.	Wholly condemned U.1.	Wholly black, injured or damaged U.2.	Overweights, boars, sows, etc. X.	Partly Black Y.	
.19	2.49	.03	.41	.90	.01	4.03
						TOTAL 100%

These figures have been calculated from the purchase and grading statements which the curers furnished to the Ministry.

The standard price was a shade higher than in August, and the realised price per cwt. less levy and contribution charges, was increased by 2/10d. to 61/9d. The average weight per pig was 5 lbs. heavier at c.1.2.24, and the average price per carcase was 7/10d. more than in August at £5 6s. 0d.

The Pigs (Provisional Prices) (Northern Ireland) Order, 1939, took effect as from 27th September, 1939, and grading under the Bacon Industry Act (Northern Ireland), 1939, was discontinued. No further statistics on these lines will, therefore, be published.

BUTTER.

WHOLESALE AND RETAIL PRICES.

The following maximum prices, as fixed by the Ministry of Food, were in operation during the month of November.

First hand price, "ex store"—145/- per cwt. in bulk.

Wholesale price delivered—152/- per cwt. in bulk.

Retail price—1/7d. per lb.

The maximum charge which a retailer may make for packing butter has been priced at the figure of 6/- per cwt.

BUTTER (REQUISITION AND CONTROL) ORDER
(NORTHERN IRELAND) 1939.

Under the terms of this Order all butter in cold stores above a certain size on October 21st, and all butter produced in or imported into Northern Ireland after that date had to be placed at the disposal of the Ministry acting on

behalf of the Ministry of Food. Since the date of the Order all butter produced in creameries and other factories has been purchased by the Ministry at a fixed price, and compensation is being paid to owners of butter which has been requisitioned in cold store. Simultaneously with the introduction of requisitioning, a temporary distribution scheme has been brought into force whereby available supplies are being conserved by restricting the quantity released to the trade by about half the normal amount. To avoid any hold up in trade, owners of butter in cold store were released a proportion of their stocks on application, and since October 22nd the Ministry has been re-selling requisitioned or purchased supplies to wholesalers to meet their orders. All butter is being issued as "Government Butter" irrespective of type or origin, but adequate measures are being taken to secure that only first quality butter is being released to the consumer. The sources of supply arranged in all cases by the Ministry are creameries in Northern Ireland, and certain cold stores.

MARKETING OF EGGS ACTS (N.I.) 1924—1937.

NORTHERN IRELAND EGG PRICES.

The following table shows the prices fixed by the Ministry, and payable by licensed wholesale dealers, for eggs purchased from producers during the weeks specified, as compared with the prices fixed for the corresponding weeks of 1938.

			1939				1938			
			Hen Eggs per lb.*		Duck eggs per doz.*		Hen eggs per lb.		Duck eggs per doz.	
			s.	d.	s.	d.	s.	d.	s.	d.
November	4th	...	1	4½	1	9	1	4	1	6
"	11th	...	1	6	2	0	1	3¼	1	5
"	18th	...	1	6	2	0	1	2	1	5
"	25th	...	1	6½	2	1	1	2½	1	5
December	2nd	...	1	5¾	2	1	1	1	1	5

* Where hen eggs are delivered by the producer to the packing store of a licensed Wholesale dealer of Class A an additional ½d. per lb. is payable; in the case of duck eggs an additional ¾d. is payable for each complete dozen so delivered.

Payment on a quality basis came into operation during the week ended 5th March, 1938. The following were the standard deductions :—

Hen Eggs : Seconds and soiled eggs, ½d. per egg; Rejects 2d. per egg during the week ended 4th November, afterwards 2½d. per egg.

Duck eggs : Rejects, 1¾d. per egg during the first week of November, afterwards 2d. per egg.

EGGS.

MAXIMUM PRICES.

WHOLESALE AND RETAIL.

The following maximum prices, as fixed by the Ministry of Food, came into operation on the 6th November, 1939.

Category		Maximum prices.		
		by importer	by wholesaler	by retail
I	Home produced fresh eggs (a) (eggs produced in Great Britain and (b) Northern Ireland) (c)	per 120 — — —	per 120 27/- 22/- 17/-	per doz. 3/- 2/6 2/-
II	*Eire fresh eggs (a) (b)	21/- 18/6	22/- 19/6	2/6 2/3
III	Eggs produced in Belgium, Denmark, (a) Estonia, Finland, France, Holland, (b) Italy, Latvia, Lithuania, Norway and Sweden	18/6 16/-	19/6 17/-	2/3 2/-
IV	†Eggs produced in the Dominions (a) (except South African eggs marked "Cooking"), North and South (b) America, and home-produced cold- stored, chilled or gas stored eggs	13/9 11/6	14/9 12/6	1/9 1/6
V	All eggs other than home-produced (a) eggs and those specified above (b) (c)	13/9 11/6 9/9	14/9 12/6 10/6	1/9 1/6 1/3

*Eggs from Eire are now placed in a separate category and may be sold at prices higher than those charged for other "near European eggs" by 3d. per dozen retail, and 2/6 per 120 wholesale.

†Eggs from Estonia, Latvia, and Lithuania are now transferred to the "near European" category.

Other prices have been raised by 3d. per dozen retail and 2/- to 2/6 wholesale compared with the previous Order of October 20th. Maximum prices for sales by importers have also been specified for all imported eggs in Categories II, III, IV and V. These prices are 1/- per 120 below the wholesale price for all categories except V (c) where the difference is 9d. per 120.

(a) Minimum weight 15 lbs. per 120 (no 12 eggs to weigh less than 22½ ozs.).

(b) Categories I to IV—Minimum weight 12 lbs. per 120 (no 12 eggs to weigh less than 17½ ozs.). Category V—All eggs less than 15 lbs. per 120, other than eggs produced in China, Egypt and Roumania weighing less than 12 lbs. per 120.

(c) Category I—All eggs less than 12 lbs. per 120.

Category V—Eggs produced in China, Egypt and Roumania weighing less than 12 lbs. per 120.

MILK AND MILK PRODUCTS ACTS (N.I.) 1934 to 1938.

Having considered evidence submitted to them as to increased costs of production and distribution, the Joint Milk Council has decided that as from 19th November, 1939, the following amended prices for milk shall take effect.

PRODUCERS' PRICES.

From 19th November, 1939, to 30th April, 1940, inclusive:—

Grade A.—Not less than $\frac{1}{8}$ per gallon.

Grade B.— $\frac{1}{6}$ per gallon.

Grade C.— $\frac{1}{6}$ per gallon.

From 1st May, 1940, to 30th September, 1940, inclusive:—

Grade A.—Not less than $\frac{1}{6}$ per gallon.

Grade B.— $\frac{1}{4}$ per gallon.

Grade C.— $\frac{1}{4}$ per gallon.

RETAIL PRICES.

In the County Boroughs of Belfast and Londonderry, the Boroughs of Bangor and Newtownards, the Urban Districts of Carrickfergus, Holywood and Lisburn, the Rural Districts of Belfast and Castlereagh, the portion of the Hillsborough Rural District, comprised in the District Electoral Division of Breda, the portions of the Larne Rural District, comprised in Edentown, the District Electoral Division of Carrickfergus Rural, and the townland of Kilroot, the portions of the Lisburn Rural District comprised in the District Electoral Divisions of Dunmurry, Lambeg and Malone:

- (i) From 19th November, 1939, to 30th June, 1940, inclusive, and from 1st September, 1940, to 30th September, 1940, inclusive.

Milk of Grade A.—Not less than $\frac{2}{6}$ per gallon.

Milk of Grade B.— $\frac{2}{4}$ per gallon.

Milk of Grade C.— $\frac{2}{2}$ per gallon.

- (ii) From 1st July, 1940, to 31st August, 1940, inclusive.

Milk of Grade A.—Not less than $\frac{2}{4}$ per gallon.

Milk of Grade B.— $\frac{2}{2}$ per gallon.

Milk of Grade C.— $\frac{2}{-}$ per gallon.

Provided that milk of Grade B or Grade C sold by retail in bottles containing not more than one-third pints may be sold at not less than the appropriate price per gallon set out above.

In areas other than described above retail prices are described in terms of minimum prices, and these minimum prices have not been altered.

AGRICULTURAL RETURNS ACT (N.I.) 1939.

The Ministry desires to bring to the notice of farmers in Northern Ireland that, with the passing into law of the above Act, every occupier of any agricultural land, or the person having the management on behalf of the occupier of any agricultural land in Northern Ireland will be required to furnish to the Ministry, at any time or times in each year, such returns as may be prescribed. The returns must be made in writing, or to any member of the Royal Ulster Constabulary authorised by the Ministry to act as an enumerator of agricultural statistics. Farmers in Northern Ireland should note that the first day of January, 1940, has been prescribed by the Ministry of Agriculture, Northern Ireland, as a day to which the information shall relate.

METHOD OF COLLECTION.

Members of the Royal Ulster Constabulary acting as enumerators will, during the month of January, visit every farmhouse in Northern Ireland for the purpose of obtaining particulars of the areas of crops, numbers of live-stock, and numbers of agricultural machinery on their land on the 1st January, 1940. In any case where a farmer is absent from home, he should leave a note of the particulars of the areas under his crops, numbers of live stock, and numbers of agricultural machinery on his land, and for this purpose the form hereunder may be used.

Farmers will appreciate that agricultural statistics are of great importance, and should be careful that any information which is given to the members of the Royal Ulster Constabulary is accurate. The full co-operation of farmers is, therefore, requested, as, although the Ministry has power to take action in any case where a person refuses to give the information or gives incorrect information, the Ministry does not desire to take such action.

The Ministry also wishes to direct the notice of farmers to the fact that the information so furnished can only be used for the purposes of the preparation and publication by the Ministry of agricultural statistics, or for the purposes of the annual agricultural statistics in connection with the operation of the Wheat Acts, 1932 and 1939, and the Agricultural Development Act, 1939, or for any purpose which the Ministry thinks necessary in connection with the increase or maintenance of the production of foods by means of agriculture, and to facilitate the distribution of agricultural machinery, seeds, fertilisers and feeding stuffs.

Area of Crops, etc.:—	Statute Acres	Machinery :—	No.
Total area of Farm, including land taken		Motor Tractors used for agricultural purposes only ... ..	.....
Area of land taken		Tractor Ploughs ... ..	.....
Area under Winter Wheat at 1st January, 1940		Disc Harrows ... ..	.....
Area ploughed (excluding fruit)		Self Binders ... ..	.....
Area under fruit		Threshing Machines (portable) ... ..	.....
Area to be harvested as 1st year's hay in 1940			

LIVE STOCK

Cattle :—	No.	Sheep :—	
Bulls, for service		Sheep kept for breeding purposes .....	.....
Cows { In milk		Rams for service ... ..	.....
{ In calf but not in milk		Ewes ... ..	.....
Heifers { In calf		Other Sheep { One year old and upwards .....	.....
{ In milk		{ Under one year ... ..	.....
Other Cattle { Two years old and upwards		Total number of sheep ... ..	.....
{ One year old and under two years		Poultry :	
{ Under one year		Turkeys { Hatched since 1st June, 1939 ... ..	.....
Total number of cattle		{ Other ... ..	.....
Pigs :		Geese { Hatched since 1st June, 1939 ... ..	.....
Pigs kept for breeding purposes		{ Other ... ..	.....
Boars for service		Ducks { Hatched since 1st June, 1939 ... ..	.....
Sows		{ Other ... ..	.....
Other Pigs { 5 months old and upwards		Ordinary Fowl { Hatched since 1st June, 1939 ... ..	.....
{ Over 2 months and under 5 months		{ Other ... ..	.....
{ Under 2 months		Total number of Poultry ... ..	.....
Total number of Pigs			

AGRICULTURAL WAGES (REGULATION) ACT (NORTHERN IRELAND) 1939.

The Bill received Royal Assent on Wednesday, 6th December, and arrangements are now being made for the early establishment of an Agricultural Wages Board in accordance with the provisions of the Act. The Board shall consist of the following persons :

1. Three members appointed by the Minister of Agriculture, of whom such one as the said Minister may designate shall be the Chairman of the Board.

2. Six members, being representatives of employers in agriculture, and appointed by the Ulster Farmers' Union and other prescribed organizations (if any) in such a manner and according to such method of distribution as between the said organizations as the said Minister may from time to time determine.

3. Six members, being representatives of workers in agriculture, and appointed by the Amalgamated Transport and General Workers' Union and other prescribed organizations (if any) in such manner and according to such method of distribution as between the said organization as the said Minister may from time to time determine.

SCHEME FOR IMPROVEMENT OF AGRICULTURAL HOLDINGS.

Applicants for grants under the terms of the Ministry's Scheme for Improvement of Agricultural Holdings are advised that the Scheme has been revised, and now provides that grants shall be given only for work which can be regarded as directly connected with food or flax production. The following classes of work are now eligible for grant :—

- (a) Drainage of arable land ;
- (b) Improvement of ditches where such work is necessary to provide an outfall for new field drains ;
- (c) Improvement of streams where necessary to prevent extensive flooding ;
- (d) Stubbing of whins on land that is to be ploughed immediately ;
- (e) Construction and reconstruction of flax dams ; and
- (f) Excavation of wells where the Ministry is satisfied that this is desirable in connection with economic food production.

It should be noted, in addition, that the Scheme now provides that in respect of holdings with a Poor Law Valuation of not more than £150 the

rate of grant shall be 75% of the labour cost, and that in the case of Schemes on holdings with Poor Law Valuations between £150 and £250 the rate of grant shall be 50% of the labour cost.

If the grant provisionally approved in any case covers work of stubbing whins it must be understood that the grant towards the cost of such work will not be paid until the land is ploughed.

FERTILISERS.

By an Order entitled, The Control of Fertilisers (No. 1) Order, 1939, dated November 7, 1939, made by the Minister of Supply under Regulation 55 of the Defence Regulations, 1939, maximum prices have now been fixed for superphosphate of lime and compound fertilisers. These prices have been fixed at the level ruling in the base period, which was taken as the four months ending 30th June, 1939, with such additions or deductions as may be authorised.

Additions are allowed for credit and for any increase in transport costs by road or sea. For superphosphate of lime a further addition of 9/- per ton is allowed during November, and 11/- per ton during December. In respect of compound fertilisers a general addition of 1/- per ton is allowed, as well as additions of 3d. to 8d. per unit of phosphoric acid, and for bags (when used).

MARKETING OF HOME-GROWN WHEAT.

The Ministry of Food have made an Order, which takes effect from December 1, for controlling the marketing of the home-grown wheat crop. It enables the Ministry to decide what proportions after threshing are to be allocated for milling on the one hand and for feeding-stuffs on the other, in accordance with the general situation, including the programme of imported supplies. A general licence issued simultaneously prescribed one-third as the maximum proportion which can be sold for purposes other than flour-milling at the outset. The method of control will impose the minimum interference with the normal methods of marketing the home crop. The Ministry do not purchase the crop, but require all registered growers to sell wheat to approved buyers, who are either the flour millers or the merchants authorised to give certificates under the Wheat Act. The proportion which may be sold by the merchants as seed wheat and for feeding stuffs is as prescribed by licence.

RYE.

MINIMUM PRICE TO BE GUARANTEED.

Simultaneous with the announcement made by the British Minister of Agriculture and Fisheries on 7th December regarding the intention to amend the Scheme of Ploughing Grants, he informed the House of Commons that growers of rye will receive a guaranteed minimum price on similar lines to those which now guarantee to farmers a fair price for oats. Parliamentary sanction to give effect to this decision will be sought in the near future.

It has been pointed out that an unremunerative price for rye has been the chief factor against the growing of this crop in Great Britain which is stated to be often safer and more productive than other cereals on some soils. In this connection it may be mentioned that it is suitable for light, sandy land, such as is found near the sea-shore, but it is not grown in Northern Ireland to any appreciable extent, only 249 acres being sown in 1939.

The crop will be subsidised, if prices make a subsidy necessary, on an acreage basis as obtains for oats.

APPLES.

THE IMPORTATION OF GOODS PROHIBITION ORDER No. 8.

Under this Order, dated 15th November, 1939, the Board of Trade has prohibited the importation of apples and pears except under licences issued by the Import Licensing Department of the Board of Trade. Importation from Empire countries, however, has been permitted until further notice by an Open General Licence. Arrangements are being made with the Canadian Government for the limitation of shipments of apples from Canada to the United Kingdom during the remainder of the current season.

Fuller information as to the operation of the Order can be obtained on application to the Import Licensing Department of the Board of Trade.

THE SEED POTATOES (MAXIMUM PRICES) ORDER, 1939.

An Order, made by the Ministry of Food, which took effect from Monday, 4th December, 1939, fixes maximum prices to be charged for seed potatoes, and prescribes compulsory top and bottom riddles.

The Order applies to seed potatoes sold for planting in Great Britain, but does not apply to stock seed, nor to seed licensed for export.

The Order applies to all seed potatoes as defined therein other than seed already the subject of a contract made prior to the date on which the Order comes into operation.

Seed potatoes which do not comply with the definition in the Order may be delivered under a licence, application for which must be made to the Ministry of Food, Potato Section, St. John's College, Oxford.

In all cases the riddles applicable to the potatoes grown in Northern Ireland are top riddle $2\frac{1}{4}$ ", and bottom riddle $1\frac{1}{4}$ ", except the varieties Arran Victory and Golden Wonder, in which the top riddle is 2", and Kerr's Pink and King Edward VII, for which the top riddle is $2\frac{3}{8}$ ".

In all cases the riddles applicable to the potatoes grown in England and Wales are top riddle 2" and bottom riddle $1\frac{1}{4}$ ".

THE SECOND SCHEDULE.

Maximum Prices (Northern Ireland and England and Wales).

Variety	Northern Ireland Prices F.O.B. Northern Ireland Ports (sacks excluded).		England and Wales Growers' Prices F.O.R. or on Buyer's Lorry (sacks excluded)	
	Classification		Classification	
	"Class I C.L.T.S. Certificate" "Class I C.L. Certificate" "Class I A.T.S. Certificate"	"(Northern Ireland Uncertified)"	"T.S. Certificate" "A.T.S. Certificate" "True type (Non-immune) Certificate"	"Class I (English once grown)"
	Shillings per ton	Shillings per ton	Shillings per ton	Shillings per ton
1st Earlies				
Herald	130/-	110/-	130/-	120/-
Immune Ashleaf				
Beauty of Hebron				
Duke of York				
Eclipse				
Epicure	150/-	130/-	150/-	140/-
Sharpe's Express				
Ballydoon				
Arran Pilot	165/-	140/-	165/-	160/-
May Queen	175/-	150/-	175/-	150/-
Arran Crest	190/-	170/-	190/-	180/-
Ninetyfold				
Di Vernon				
Doon Early	270/-	230/-	270/-	240/-
Witch Hill				

Variety	Northern Ireland Prices F.O.B. Northern Ireland Ports (sacks excluded).		England and Wales Growers' Prices F.O.R. or on Buyer's Lorry (sacks excluded)	
	Classification		Classification	
	"Class I C.L.T.S. Certificate" "Class I C.L. Certificate" "Class I A.T.S. Certificate"	"(Northern Ireland Uncertified)"	"T.S. Certificate" "A.T.S. Certificate" "True type (Non-immune) Certificate"	"Class I (English once grown)"
	Shillings per ton	Shillings per ton	Shillings per ton	Shillings per ton
2nd Earlies				
Great Scot				
King George V.	102/6	85/-	102/6	95/-
British Queen				
Ally	105/-	85/-	105/-	95/-
Arran Comrade				
Arran Luxury	125/-	105/-	125/-	115/-
Ben Lomond				
Arran Signet	140/-	120/-	140/-	130/-
Dargill Early	145/-	125/-	145/-	135/-
Catriona				
Edzell Blue	185/-	165/-	185/-	175/-
Dunbar Rover				
Main Crops				
Arran Banner				
Arran Victory				
Dunbar Cavalier				
Kerr's Pink	105/-	85/-	105/-	95/-
President				
Redskin				
Rhoderick Dhu				
Arran Chief				
Majestic	105/-	85/-	105/-	90/-
King Edward VII	107/6	95/-	107/6	105/-
Irish Queen	110/-	90/-	110/-	95/-
Arran Consul	112/6	95/-	112/6	95/-
Doon Star				
Dunbar Archer	112/6	95/-	112/6	105/-
Red King				
Golden Wonder	120/-	95/-	120/-	105/-
Up-to-Date	120/-	105/-	120/-	115/-
Champion				
Tinwald Perfection				
Dunbar Standard	125/-	105/-	125/-	115/-
Arran Peak				
Arran Cairn				
Field Marshal				
Gladstone	130/-	105/-	130/-	115/-
Sutton's Abundance	145/-	125/-	145/-	135/-
Bishop	165/-	145/-	165/-	155/-

In all cases the riddles applicable to the potatoes grown in Scotland are—top riddle $2\frac{1}{4}$ " and bottom riddle $1\frac{1}{4}$ ", except the varieties Arran Victory and Golden Wonder in which the top riddle is 2", and Kerr's Pink and King Edward VII for which the top riddle is $2\frac{1}{8}$ ".

THE FIRST SCHEDULE.

Maximum Prices (Scotland).

Grower's Prices F.O.R. or on Buyer's Lorry. (Sacks excluded)				
Variety	Classification. Class I. (Scotch.)			
	"T.S.(A) Certificate" "N.I.(A) Certificate"	"T.S.(H) Certificate" "N.I.(H) Certificate"	"Grade B Report"	"Un- certified"
	Shillings per ton	Shillings per ton	Shillings per ton	Shillings per ton
1st Earlies				
Herald	140/-	120/-	115/-	110/-
Immune Ashleaf				
Beauty of Hebron				
Duke of York				
Eclipse				
Epicure	160/-	140/-	135/-	130/-
Sharpe's Express				
Ballydoon				
Arran Pilot				
May Queen				
Arran Crest	180/-	150/-	145/-	140/-
Di Vernon				
Ninetyfold				
Doon Early				
Witch Hill				
2nd Earlies				
Ally	110/-	95/-	90/-	85/-
Great Scot				
King George V				
British Queen				
Arran Comrade				
Arran Luxury	135/-	115/-	110/-	105/-
Ben Lomond				
Arran Signet				
Dargill Early				
Catriona				
Edzell Blue	195/-	175/-	170/-	165/-
Dunbar Rover				
Main Crops				
King Edward VII	110/-	105/-	100/-	95/-
Arran Banner				
Arran Victory				
Dunbar Cavalier				
Kerr's Pink				
Redskin	115/-	95/-	90/-	85/-
Rhoderick Dhu				
Arran Chief				
President				

Grower's Prices F.O.R. or on Buyer's Lorry. (Sacks excluded)

Variety	Classification. Class I. (Scotch.)			
	"T.S.(A) Certificate" "N.I.(A) Certificate"	"T.S.(H) Certificate" "N.I.(H) Certificate"	"Grade B Report"	"Un- certified"
	Shillings per ton	Shillings per ton	Shillings per ton	Shillings per ton
Main Crops—contd.				
Arran Consul				
Red King	120/-	105/-	100/-	95/-
Dunbar Archer				
Irish Queen	120/-	100/-	95/-	90/-
Majestic	120/-	95/-	90/-	85/-
Doon Star	125/-	100/-	95/-	90/-
Up-to-Date	125/-	115/-	110/-	105/-
Golden Wonder	135/-	105/-	100/-	95/-
Champion				
Tinwald Perfection				
Field Marshal	135/-	115/-	110/-	105/-
Dunbar Standard				
Arran Peak				
Arran Cairn				
Gladstone	145/-	115/-	110/-	105/-
Sutton's Abundance	155/-	135/-	130/-	125/-
Bishop	175/-	155/-	150/-	145/-

AGRICULTURAL NOTES.

SEASONAL FARM NOTES.

PLOUGHING.—Advantage should be taken of every favourable opportunity to push ahead with ploughing operations. There will be much extra land to be ploughed this season, and in order to avoid a rush of work in spring every farmer should aim at finishing up the ploughing of lea and stubble land at the earliest possible date. The putting in of the extra crops will necessitate the full employment of labour, horses, and tractors in the spring, and it is, therefore, of the utmost importance that the ploughing of lea and stubble land should be completed early, so as to enable all the resources of labour, power and implements being employed at sowing and planting when the time for that arrives.

Besides ensuring that there shall not be an undue rush of work in spring, early ploughing has other advantages. The upturned soil is exposed to the action of winter frosts, which aid considerably in the production of a good “tilth” in spring. Frost action is particularly helpful on stiff, heavy soils, which are very difficult to prepare for sowing and planting if ploughed late in the season. Stiff lea land which is ploughed late is very liable to tear up in grassy sods when the ploughed scores are being harrowed during the sowing of grain crops; or, even if the sods do not tear up, the furrows will be loosened, with the result that a proportion of the seed, sometimes an appreciable amount, may get lost by falling down between them. If the land is ploughed early in the season the furrows will have had time to consolidate before sowing time arrives, and will not tear up or loosen when being harrowed. Also, the frost action on the upturned soil is very beneficial, and leaves it so that it breaks down easily on harrowing to form a fine seedbed in which all the seed will be well covered. One stroke of a harrow in spring has as much effect on heavy land which was ploughed before Christmas as two strokes would have on the same land not ploughed until March.

Rich lea, where there is a danger of the oats lodging, should always be ploughed early. This will leave a good firm seedbed for sowing, and will help to reduce the incidence of lodging.

PLOUGHING IN MANURE.—The practice of ploughing in the manure for a root or potato crop has much to commend it, and every farmer would be well advised to manure at least a part of his ground for root or potato crops in this manner if a supply of well-made manure is available. This helps to give a better distribution of labour throughout the year, as the rush of work in the spring is lessened. The results obtained are equally as good as when the

manure is put in the drills in spring, provided, of course, that the rate of application is the same in each case. Farmers have been known to criticise the practice of ploughing in manure, but in many such cases the quantity of manure applied and ploughed in was considerably less per acre than would normally be applied to the drills in spring.

The manure to be ploughed in must be short and well rotted, as long half-rotted manure will gather on the coulter of the plough, making ploughing extremely difficult, or even impossible.

CARTING MANURE.—Freshly made or long, strawy manure, is best left until spring in a compact heap, when it will have rotted and can be applied in the drills. The manuring of land in spring is greatly facilitated by having a heap of manure convenient to each field in which potatoes or roots are to be grown, and it is a good plan to utilise slack periods during winter, such as spells of frost, for carting out the freshly-made manure from the farmstead to such heaps.

A manure heap should be squarely built and the manure well tramped. This ensures the exclusion of air from the manure, and leads to the right type of putrefactive action taking place in the heap; it also prevents the action of certain bacteria which would liberate much of the fertilising properties from the manure in the form of gas. When a heap of manure is being made as the manure is produced, or as suitable occasions arise, it should be built in benches. This ensures that each few loads added to the heap can be kept well on top of each other and thoroughly compacted, thus ensuring the proper conditions mentioned above. If each few loads drawn out are spread in a shallow layer over the top of the entire heap the exclusion of air cannot be satisfactorily accomplished, and "heating", with the elimination of valuable manurial constituents, will occur and continue.

In view of the increased area to be placed under crops next spring additional quantities of farmyard manure will be necessary on every farm, and, therefore, every effort should be made not only to conserve the manure during storage, but to make as much manure as possible during the present winter and early spring. The liquid should be conserved by soaking it up with peat moss, straw, etc. If chaff and refuse following threshing are used for this purpose, it is important to ensure that the manure is thoroughly rotted before being applied to the land, as otherwise it will introduce large numbers of weed seeds which will grow.

IMPROVEMENT OF GRASSLAND.

At this season of the year much can be done to improve the quality and productive capacity of pastures, and this is especially important now in view

of the reduced area under grass, consequent on the increased area under tillage, and also because of the necessity to obtain as much food as possible from the grassland.

LIMING.—A large proportion of the soils in Northern Ireland have been found to be deficient in lime and of an acid nature. Since the clovers and the better quality grasses flourish best in well-limed soils, it follows that the liming of acid soils is a necessary part of any method of grassland improvement. There are ample supplies of lime available, and the Land Fertility Scheme is still in operation. Therefore, farmers can get lime at half the usual cost if it is ordered from approved suppliers under the Scheme. Lists of approved suppliers may be seen at any Police Barracks or creamery.

The most suitable time to apply lime to grassland is during autumn and early winter. Hence all farmers intending to apply lime to pasture this winter should do so at the earliest opportunity. Further information on liming will be found in Leaflet No. 84, copies of which may be had from the Ministry, on request.

MANURING.—Phosphatic manures have been described as the basis of grassland improvement, and this is true generally in Northern Ireland. Old pastures which are not being ploughed up and which have not been manured recently will benefit from a dressing of from 5 to 8 cwt. per statute acre of Semsol, Gafsa rock phosphate, or Basic Slag applied during autumn or early winter—not later than January. The phosphatic manure should be applied the year before applying the lime, and the lime applied the following year at the rate of from 20 to 30 cwt. per statute acre. The phosphatic manure which is most suitable for application to grassland after January is superphosphate, as it acts much more quickly than those mentioned above.

On the lighter soils one cwt. Potash Salts per acre, in addition to the phosphatic manure, will be beneficial. If unable to obtain a supply of this manure to mix with the phosphatic manure the best substitute is potassic superphosphate.

HARROWING.—It should be remembered that no manure can produce an effect until it is washed into the soil from which the roots of the pasture plants draw their nourishment. Manures applied, therefore, on top of a mat of old herbage and fog will be slow to act, and some may even be lost to the plants. For this reason the thorough harrowing of the pasture to break up any mat on the surface is necessary before the manures are applied. This prior treatment ensures that the manures reach the plant roots, and that the plants make full use of them. This is especially the case with lime which is not so finely divided as the artificial manures.

The breaking up of the mat by harrowing also encourages the growth of new grasses in spring, and, in addition, the harrowing spreads the droppings which are the cause of the familiar rank tufts seen in grassland, and which stock always avoid. The improvement of grassland is dealt with fully in Leaflet No. 90, copies of which may be had, on request.

CARE OF DRAINS.—During the past few years many tracts of low-lying grazing land have been drained under the Land Improvement Scheme. Now that these areas have been improved it would be a grave mistake not to keep the drains in good order so that the improvement shall persist. The outlets of drains should be inspected frequently, and any damage caused by vermin, etc., repaired before it becomes serious; further, the ditches into which the drains run should be kept clear.

Open drains in grazing land are liable to become tramped in here and there by stock crossing them, or when drinking from them. Usually a little time spent each winter, or at other slack periods, will be sufficient to keep these drains in good order. If such stoppages are not cleared the flow of water will be prevented, and the land in the vicinity will become waterlogged. Waterlogged land harbours pests such as the snail which is essential for the existence of the liver fluke, and, in addition, the whole drain soon becomes filled up with weeds and herbage. Therefore, attention to drains is also a means of preventing diseases of stock. Means of crossing should be provided over all open drains in grazing land, so that stock may develop the habit of crossing the drains by such "bridges" and not by jumping across them.

DESTRUCTION OF PESTS.—Under present circumstances, more than ever before, it is necessary to wage war on pests such as rats and rabbits. Every year these pests consume and destroy large amounts of food material and, besides, rats act as carriers of disease. During winter, rats usually migrate to the farmstead from the fields and take up their abode in meal stores, pig houses, poultry houses, corn stacks, etc., and the damage they cause is well known to all farmers. Every opportunity should be taken to reduce their number by trapping, gassing, poisoning and other means. Methods of controlling the pests are described in Leaflet No. 93, copies of which may be had from the Ministry, on request. Where rats are suspected to be frequenting corn stacks they may be made to bolt from the stacks by prodding the stacks with an iron bar or, in the case of small stacks, by shaking them, and if provision is made for killing the bolting rats a large number may be destroyed.

In addition to destroying the pests the damage done may be reduced by suitably protecting feeding stuffs. If possible, meals should be stored in iron containers, or the existing containers made rat-proof by sheeting the corners with tin. Buildings in which foodstuffs are stored should also be made rat-proof, if possible.

POTATOES.—The sooner potatoes are selected for seed the better. Only seed from a certified crop should be selected and, if such seed has to be purchased, orders should be placed early to avoid delay or even disappointment in spring. Considering the present prices of potatoes, there is no excuse for any farmer not obtaining a supply of good seed.

The practice of sprouting seed in boxes cannot be too highly recommended. The seed should be boxed as soon as possible now, and the boxes of seed placed in a well-lighted, frost-proof house. At intervals the seed should be inspected, and any decaying tubers removed. Care should be taken to see that all the boxes are in reasonably good light. This is necessary for the production of the short, green, sturdy sprout which is the proper type of sprout to aim at producing on sprouted seed. Seed which is sprouted is less likely to miss than unsprouted seed, and may be as much as one month earlier in growth.

The practice of leaving the seed for planting in the pits until spring cannot be too strongly condemned, as usually when the pits are uncovered it is seen that the tubers have wasted much of their substance in the production of long, weak sprouts, which must be broken off before the tubers are planted.

Where a number of varieties are stored in the same building great care should be taken to keep the different varieties separated. Each variety should be labelled so that no mistake can be made.

Again, when seed potatoes from a certified crop are being sprouted the boxes should not be placed in the same building as those containing tubers from an uncertified crop, as insects feeding on the sprouts transmit virus diseases, such as leaf roll and mosaic, from diseased to healthy tubers, and in this way the certified stock may become infected with virus diseases. This precaution is especially important in the case of stock seed.

Every effort should be made to keep rats out of houses in which potatoes are stored. Not only will these pests damage the tubers, but they will mix those of different varieties where more than one variety is stored in a house.

SEASONAL LIVESTOCK NOTES.

The obtaining of supplies of certain kinds of foods for livestock in sufficient quantities has not been possible during the past few months, and many farmers have been worried because they could not make up rations for their stock on the same lines as in previous years.

It should be remembered that the number of different rations that can be made up and used satisfactorily for any class of stock is very large. Hence, if all the ingredients for any particular ration cannot be obtained, this need not be a cause for undue concern or worry so long as a substitute is available.

At the same time it is likely that imports of feeding stuffs will continue to be lower than previous to the war, and provision should be made on every farm, whether large or small, for the production of the maximum amount possible of home-grown foods such as oats, barley, wheat, beans, potatoes and root crops. The object should be to make the farm as self-supporting as possible by producing the foods which the stock kept on it will require. This policy, as well as being in the National interest, will also be in the best interests of the farming community.

WORKING HORSES.—With the increased area under tillage, it is to be expected that farm horses will have more work to do than previously. Apart from working on a larger number of days, it is probable that as spring approaches many horses will also have to work longer hours per day. If horses are to stand up to this extra work their feeding and management must receive careful consideration, and extra feeding will be necessary. Normally, where an 8-hour day is worked it should be divided up into two spells of 4 hours each, and the horses should be allowed at least $1\frac{1}{4}$ hours for feeding, between these two spells. Half the oats ration should be given at this feed, and the other half at the morning feed. In each case the horses should be offered water before being given solid food. On coming in at night from work the horses should again be offered water and get a thorough rubbing down, especially if they are wet or overheated. Any soil in their hoofs should be picked out. Good hay should be given, and the stables well bedded. Two to three whole turnips or mangels, or a bran mash, should be given at night, as these help to keep the horses healthy by aiding digestion.

The most suitable grain for horses is oats, preferably fed in the crushed form.

A suitable ration for a Clydesdale horse doing 8 hours work daily would be from 16 to 20 lb. crushed oats, 18 lb. hay, and 10 lb. turnips or mangels per day. During slack periods the grain ration should be reduced, as the continued heavy feeding of oats to an idle horse is liable to cause "big leg" or "weed". It is a good plan to give a mash at the week ends to act as a corrective when the horse is idle. A very good corrective is a mash of boiled turnips, barley and bran, but a mash of bran alone is also satisfactory.

Important points in the feeding of working horses are to feed at regular hours, and not to work for spells longer than 4 hours without feeding, to offer water before feeding, and never to make an abrupt change in the diet. Horses coming in from work in an overheated condition should not receive a large amount of cold water, but should be given a limited quantity of tepid water. Icy cold water given to an overheated horse may cause colic.

DAIRY COWS.—Cows in high production should be given an allowance of green food such as cabbage or kale, or, if these are not available, an allowance of turnips or swedes. Mangels are also valuable for dairy cows, but should not be fed until after Christmas, as if fed before that time they tend to cause scouring. Mangels are especially valuable for feeding in late spring before the grass comes and after the turnips and other green food are all used. Roots may be fed whole, sliced or fingered. The heavy milkers should get the best hay as well as the normal allowance of meals. The meal ration will, of necessity, consist of one of the emergency dairy mixtures in conjunction with home-grown foods, the chief of which will be crushed oats.

Dry cows and cows giving little milk need only a small allowance of meals, and where hay is scarce may receive good straw instead. Full feeding is necessary, however, for some time before cows calve. The meal ration for all cows should contain a mineral mixture at the rate of 3 lb. per cwt. meal mixture. A suitable mineral mixture is equal parts by weight of ground limestone, steamed bone flour and common salt.

Further information on the feeding of dairy cows is given in leaflets Nos. 16 and 42, copies of which can be had on request from the Ministry.

FATTENING CATTLE.—In normal times maize meal forms a large proportion of the rations used for feeding to fattening cattle. However, maize meal can be replaced by home-grown foods such as crushed oats or barley, and a suitable ration for fattening cattle can be made up from a mixture of such foods as crushed oats, crushed barley, bran and pollard, with a small proportion of a high protein food such as decorticated earthnut cake or meal. In fact larger, older cattle may be successfully fattened without the use of any high protein food, if good hay and bran are included in the diet.

Many provender merchants are preparing a cattle mixture "A", which may be used with an equal quantity of crushed oats for feeding to fattening cattle.

The quantity of meals given daily will depend on the weight and age of the animals, and on how long they have been getting meals. Usually, at the beginning of the fattening period from 2 to 3 lb. daily is sufficient, and this amount may be increased gradually until the animals are receiving from 6 to 8 lb. daily at a live weight of about 10 cwt.

An allowance of roots should be given—say from 30 to 60 lb. daily, depending on the quantity available. It is uneconomical to feed more than 60 lb. of roots per head daily. The roots should be sliced or fingered, and should be fed after the meal allowance has been eaten.

Sliced potatoes may be successfully used instead of roots, and from 15 to 30 lb. may be given per head daily. Potatoes have slightly over twice the feeding value of swedes or mangels.

Fattening cattle will eat approximately 14 lb. of hay or straw per head daily. It should be remembered that good straw is better than bad hay. Feeding should be done at regular hours, and any changes in the ration should be made gradually, especially with cattle receiving up to 6 or 8 lb. of meals daily.

It is most important that fattening cattle should be kept as quiet as possible and not disturbed between meals. Their house should be apart from that occupied by dairy cows or other stock which are allowed out daily, as the disturbance caused by the going out and coming in of other stock will prevent the fattening animals from thriving to the full extent.

Further information on the fattening of cattle will be found in leaflet No. 48, copies of which can be had on request to the Ministry.

IN-CALF HEIFERS.—In-calf heifers which are not due to calve until April or May can be kept cheaply during the greater part of the winter. They should be allowed to run out on pasture, and should be provided with a shelter. Until about two months before calving an allowance of good hay is all that is necessary. For the last two months a meal ration should be fed commencing with about 1 lb. per head daily, and gradually increasing to about 4 lb. daily just before calving time.

IN-PIG SOWS.—The sow must have exercise to ensure the production of a good litter of strong, healthy pigs. A sow not getting sufficient exercise becomes lazy and overfat, and is liable to produce a small litter of weaklings. Moreover, such a sow is awkward, and very likely to smother a relatively large number of the young pigs.

During the greater part of pregnancy a sow can be kept satisfactorily without the use of much meals. The sow can be maintained quite well largely on home-produced foods such as potatoes, roots and a little crushed oats, especially if allowed out on pasture, which is the correct place for a breeding sow. Coming towards the farrowing time the sow should get a more concentrated ration, such as from 5 to 7 lb. daily of mixture of pollard, bran and crushed oats with a mineral mixture.

SUCKLING SOWS.—For the first few days after farrowing the sow should receive light feeding such as thin mash of bran and pollard. Then the food may be gradually increased until the sow is getting about $1\frac{1}{4}$ lb. meal daily for each pig, or the equivalent of meal and boiled potatoes assuming that 4 lb. boiled potatoes are equivalent to 1 lb. meal in feeding value. Skim milk is a valuable food for the suckling sow, and up to one gallon may be given daily. This will supply the mineral and protein requirements of the sow.

THE LITTER.—The young pigs should be encouraged to eat as soon as possible—usually at about 2 to 3 weeks old. If dry meal is given, plenty of drink must be provided, and if wet feed is given care must be taken to see that any left over at one feed is removed and the trough cleaned before giving the next feed.

ANAEMIA IN PIGS.—The symptoms of anaemia or blows are familiar to most pig breeders. The young pigs become emaciated-looking, with pale skin and blue ears. The complaint is due to a deficiency of iron in the sow's milk, and occurs during the first few weeks, especially if the pigs are not allowed out. Before the young pigs have begun to feed, the remedy is to place a fresh sod in the house daily, or to paint the sow's udder twice daily with a solution containing iron. A suitable solution is made up by dissolving $3\frac{1}{4}$ oz. of iron sulphate and $\frac{3}{4}$ oz. copper sulphate (bluestone) in one pint of warm water, and then adding one pint of treacle to this solution. The treacle helps the solution to adhere to the udder and also makes it palatable to the young pigs.

Anaemia is never seen in litters which are allowed out from birth.

Leaflet No. 45 gives further information on the breeding and rearing of pigs, and copies can be had from the Ministry on request.

SHEEP—BREEDING FLOCK.—Up to the present there has been no necessity under most conditions for hand-feeding the breeding flock, unless where lambs are due very early. The aim with breeding ewes should be to keep them as cheaply as possible during winter, and to have them improving in condition during the last two months before lambing. During severe frost or snow a small allowance of good hay should be given, and $\frac{1}{2}$ to 1 lb. of meals daily. For the last 6 weeks before lambing the ewes should get an allowance of meals commencing with $\frac{1}{2}$ lb. and increasing to 1 lb. per head daily. A suitable ration would be 2 parts by weight crushed oats, 1 part by weight bran, and 1 part by weight decorticated earthnut cake or meal. If bran is not available the ration may be 3 parts crushed oats and 1 part earthnut cake or meal.

Due attention should be paid to the sheep's feet, which will occasionally need to be dressed, and it is a wise precaution to walk the sheep regularly through a foot bath containing not more than one inch deep of a 5 per cent. solution of copper sulphate (1 lb. copper sulphate in 2 gallons of water). This will prevent foot rot from spreading amongst the flock.

LIVER FLUKE DISEASE.—A careful watch should be kept for symptoms of this disease. It is at this season that sheep are likely to become affected. The disease can be prevented by dosing the sheep with carbon tetrachloride capsules as described in leaflet No. 24. Fluke disease is most likely to appear

amongst sheep and young cattle which are run on low-lying pastures. It is on such pastures that the conditions for the appearance of the snail which the flukes require to complete their development are present. Therefore, sheep, calves and young cattle should be kept off such land and run only on high-lying, well drained pastures.

SEASONAL GARDEN AND ORCHARD NOTES.

It is a very common idea that the gardening year begins about the 1st of March. Although March is one of the busiest months of the twelve in the vegetable garden, the work then will be considerably facilitated, and the prospects of success greatly improved if the preparation of the soil has been done several months before. Deep cultivation is one of the chief factors in the successful production of all kinds of vegetables, but it is especially needful for such deep rooting vegetables as onions, parsnips and carrots. The ground for these should be dug deeply. Therefore, as early in winter as possible after the ground has been cleared of such crops as beans, peas and potatoes that intended for onions, parsnips, etc., next year should either be double dug or trenched.

Where a proper rotation of crops is practised roughly one-third of the vegetable ground should be either double dug or trenched each year. For the remainder of the ground plain digging, if well done, will suffice.

Digging, although a simple operation, is not always well done, the chief fault being that a sufficient "opening" is not made at the start. To dig a plot of ground properly it should first be marked off into a number of sections. Along the end of one section a small trench about 1 ft. wide and 1 ft. deep should be made by removing the top soil. Where the section is small the soil thus removed can be thrown back over the ground to be dug. Then proceed to fill this trench by digging the adjoining top soil into it, making sure that the spade is inserted perpendicularly to the full length of the blade, and that each spadeful is turned right over as it is being thrown forward. On approaching the end of the section the opening can be gradually closed in by not throwing the spadefuls so far forward. Each section can be treated in a similar way until the entire plot is dug.

MANURING.—In the case of light soils it is not advisable to apply farmyard manure early in the winter on account of the loss of fertilising matter that would take place, due to the rain soaking quickly through the soil. For such soils, therefore, farmyard manure, when required, should be applied in the spring in a well-rotted condition when preparing the ground for planting. In the case of heavy ground, however, farmyard manure can be applied when digging or trenching in autumn and early winter, for in such soils no serious

loss of fertilising ingredients occurs; and even if the manure is fairly fresh when dug in it will be sufficiently rotted down by the time the following year's crops require it.

Where the ground is being double dug the farmyard manure should be placed on the top of the broken-up bottom soil in each trench and covered with the top soil. In the case of plain digging the manure should be placed in each opening and covered as digging proceeds.

Ground intended for carrots, parsnips and beet should not be manured if it was manured for the previous crop. Satisfactory crops of these vegetables can generally be grown with the aid of a complete mixture of artificial manures. Further details regarding the manuring of the ground, and the cultivation of vegetables, are given in Leaflet No. 67.

PLANTING FRUIT TREES AND BUSHES.—This work may still be undertaken whenever the soil is in a suitable condition; that is, moderately dry. Planting should be postponed when the ground is very wet, or when it is frozen. If the plants arrive from the nursery when planting cannot be undertaken they can be safely left for a week or two in a cool shed without being unpacked. Alternatively, the plants may be "heeled in", which is done by making a hole large enough to receive all the roots of the plants, putting the roots into this hole and covering them with soil so that they will be kept moist.

PRUNING.—The pruning of established trees should be proceeded with whenever the weather is suitable. Tall trees and those overcrowded with branches are difficult to spray properly, and require a greater quantity of spray fluid than trees of moderate height whose branches are well thinned out. The removal of crossing branches, and of dead and diseased wood, and the thinning of overcrowded fruiting spurs, are important operations in the production of large, clean fruit. Full particulars of the pruning of apple trees are given in Leaflet No. 34.

SPRAYING APPLE TREES.—Supplies of spraying materials such as tar oils, petroleum oils, or a combination of these washes should be obtained without delay so that the work of spraying may be undertaken whenever the weather permits. Supplies of these washes should be protected from frost during storage. The trees should be dry before spraying is begun, and the work should not be undertaken except when there is every prospect of the spray fluid having ample time to dry on the trees before rain sets in, or before the temperature falls to freezing point.

Black currant bushes, plum trees and damson trees, and apple trees of the varieties Beauty of Bath, Gladstone and Newton Wonder, should be sprayed with tar oil washes not later than the middle of January. If done later than that time there is a risk of damage being caused to the buds by the wash.

SUPPLIES OF SEEDS.—A list of the quantities of seeds of the different kinds of vegetables required for the coming season should be compiled, and the order for them despatched to the seedsman without delay.

FRAMES.—Frames containing cauliflower and lettuce plants should receive careful attention. The lights should be removed whenever the weather is mild and dry, and the frames freely ventilated at other times except during periods of severe frost. All dead and decaying leaves on the plants should be picked off and destroyed.

GENERAL.—Withered flowers, stalks and foliage should be cut away and removed. Flower borders should be forked over carefully so as not to damage bulbs or other roots. A supply of pea stakes should be obtained and prepared and stored for use next season.

HOT-BEDS.—Horse manure from the stables should be collected daily and stacked in a round, conical heap in preparation for the making of hot-beds. Leaves from trees such as beech, oak, etc., should be mixed with the fresh manure in equal quantities. If leaves are not available, old short manure can be used instead. Each subsequent supply of fresh manure, after having been mixed with leaves or old manure, should be incorporated in the heap, the heap being turned so that the material on the outside of the heap is brought inside, and vice versa. When enough material has been collected, the heap should be turned at least three times at intervals of three or four days. After the final turning the bed can be made.

SEASONAL POULTRY-KEEPING NOTES.

THE LAYING FLOCK.—The laying birds require careful management at this season if the maximum output of eggs is to be obtained. Pullets which have been in lay during autumn are liable to moult after the appearance of the slightest sign of unfavourable conditions. Common causes of moulting are a sudden change of quarters, sudden fright, irregular feeding, infestations of insect pests, colds, lack of drinking water, and poor housing conditions. The feeding of poultry under present conditions was dealt with in the Poultry Notes in the November issue of this report and further information on that subject is given in the article on page 459 of this issue.

INSECT PESTS.—The presence of insect pests, such as lice and red mites, on the birds will cause the birds to become unthrifty and will seriously reduce the number of eggs. Every effort should therefore be made to keep the birds free from these pests.

Lice live continuously on the bodies of the birds and may be destroyed by dusting sodium fluoride into the feathers. Where large numbers have to be treated, however, a more convenient remedy is to paint the top side of the perches with nicotine sulphate about half an hour before the birds go to roost in the evening. The heat of the birds when perching on the treated perches causes the nicotine sulphate to give off fumes which kill the lice. With both these remedies it is necessary to repeat the treatment after an interval of from 10 to 14 days as neither will kill the eggs of the lice. The second treatment will kill the lice which have hatched from eggs present during the first treatment, before they have had time to lay further eggs.

Red mites do not live continuously on the birds. They spend the daytime in crevices, etc. in the perches, and at night when the birds are roosting they creep on to the bodies of the birds and suck the blood, migrating back to the crevices, etc., as daylight appears. This means that the mites can be attacked only in the crevices of the perches and of the house in the daytime where an insecticide can be used without fear of injuring the birds. The presence of red mite can usually be detected by running the hand along the underside of a perch and seeing if the fingers are stained with blood specks. When red mites are present the house should be thoroughly cleaned out paying particular attention to all crevices, grooves, perch sockets and any other such hiding places, and the cleanings should be burnt. The perches and inside of the house should then be given a good coat of creosote making sure that the creosote gets into every crack and crevice where the mites may be hiding. An alternative treatment is the application of lime wash to which paraffin oil has been added.

Creosote is also very suitable for applying to the outside of poultry houses, acting as a preservative of the wood.

HOUSING CONDITIONS.—Poultry houses should be well ventilated but not draughty and the birds should not be crowded. Each bird needs 2 square feet of floor space in portable houses. Fresh, clean litter should be provided; straw, chaff, peat moss, wood shavings and coarse sawdust all being suitable. The floor of the house should never be allowed to become sticky or damp. Houses should be cleaned out frequently, and nesting material renewed often. These simple precautions will aid considerably in getting clean eggs. Further information on poultry houses is given in leaflets Nos. 21 and 28, and on the keeping of eggs clean, in leaflet No. 27, copies of which can be had from the Ministry on request.

CULLING.—The culling out of all unprofitable birds should go on continuously so long as there is a bird in the flock which shows lack of vigour or a poor capacity for egg production. These birds are consuming valuable food and giving little or nothing in return, and it is obvious that, especially

under present circumstances, feeding such birds is not making the best use of available food supplies. Furthermore, the early removal of all unthrifty birds may prevent a serious outbreak of disease at a later date.

HATCHING.—The hatching of eggs of general purpose breeds should be commenced now if not already begun so as to obtain pullets which will start laying at the end of next summer, and cockerels for sale as early table chickens or for breeding. The object under present circumstances should be to hatch only sufficient birds to keep the laying flock up to the normal size and to be more careful than ever about the quality of the stock from which the hatching eggs are obtained.

PURCHASE OF HATCHING EGGS. When eggs for hatching have to be purchased it is of the greatest importance to purchase eggs only from a farm which is free from disease. Such eggs can be obtained from County Poultry Stations and Accredited Poultry Farms. Under no consideration should eggs from pullets be used for hatching in the present season. The aim should be to have only good chicks which will thrive well and grow into sturdy pullets. Lists giving the names and addresses of holders of County Poultry Stations can be obtained from the County Agricultural Executive Officer and lists giving the names and addresses of owners of Accredited Poultry Farms can be had, free, on request from the Ministry. The Poultry Instructor for the district can also supply copies of these lists.

PREPARATION OF INCUBATORS.—It is very important to make sure that the incubator is not carrying the infection of some disease. It is therefore a wise policy to clean and disinfect an incubator thoroughly before the first hatch of the season and again after each hatch has been completed. The purchase of second hand incubators or any other poultry appliances is not recommended unless a full knowledge of their history is known and it is clear that the farm on which they were in use was free from disease. Particulars regarding the disinfection of incubators are given in leaflet No. 59.

MANAGEMENT OF INCUBATORS.—The directions given by the makers with an incubator should be carefully followed as the neglect of some simple operation may ruin a whole hatch. The incubator should be thoroughly examined to see that it is in good working order, and set level. The capsule is particularly important in obtaining good hatches as it is the instrument which governs the heating system of an incubator. The capsule should be tested either by placing it in a vessel of water heated to about 100 degrees Fahrenheit or holding it between the finger and thumb in front of a fire. If it is in good order the sides will bulge out, and if they do not do so the capsule is useless and a new one should be obtained.

The thermometer is also very important as it is the only way of knowing if the temperature of the incubator is correct. The vital importance of having the incubator at the correct temperature is well known, but if the thermometer is not registering the temperature correctly it will mislead the poultry-keeper. The local chemist will probably test the thermometer for his customers but testing can be done quite easily at home by placing the thermometer in a vessel of warm (not boiling) water, along with a clinical or doctor's thermometer which is known to be correct. If both thermometers show the same reading then the incubator thermometer may be considered to be registering the temperature correctly.

The lamp burner should be thoroughly cleaned before setting a hatch, for if the lamp is not in proper working order the heat cannot be at a uniform level and besides, the lamp may go out. The wick of the lamp should be trimmed daily and the best available grade of oil should be used. It should be noted that if a lower grade of oil than that ordinarily used is substituted, more cleaning of the lamp and trimming of the wick will be necessary. The incubator should be set up perfectly level, using a spirit level, to do so, as this is necessary for the maintenance of a uniform air temperature throughout the machine. Failure to do this may result in poor hatches.

Further information on the running of incubators is given in leaflet No. 20, which may be had from the Ministry on request.

INCUBATOR ROOM.—The room in which the incubator is kept need not be an elaborate one but should be well ventilated but free from draughts and so constructed that a steady temperature between 60 and 70 degrees Fahrenheit can be maintained. To ensure proper ventilation the room should have air inlets at or near floor level and an outlet in the roof. This means that there will be an upward circulation of air and in order that the eggs get full advantage of this air circulation the incubator should be placed on a slatted floor above the level of the air inlets if it is not provided with legs.

An incubator should not be placed close to a wall as this prevents proper circulation of air round it. The developing chicks in fertile eggs need a constant supply of fresh air like any other living thing. An incubator room should never feel stuffy at any time.

AVOIDANCE OF CHILLS.—Care should be taken to avoid chills both during incubation and after hatching and it should be remembered that eggs can even be chilled before setting if exposed to severe frost. It is important to see that there are no draughts in the incubator room as cold air rushing in when the incubator is opened may chill the eggs. This is especially the case after the 19th day when it is unwise to open the incubator until the hatch is completed.

TRANSFERENCE TO HOVER.—The chickens may be left in the incubator nursery for 12 hours after hatching, provided the incubator window is darkened and the temperature of the machine lowered. During the transfer to the hover chills must be guarded against. A basket lined with a piece of flannel is suitable for the purpose. Even greater care is necessary where day old chicks are purchased as if the chicks get chilled during transport the whole flock may be lost.

MANAGEMENT OF HOVER.—When chickens are to be moved from the incubator to the hover, the hover and house should be prepared beforehand and the temperature under the canopy should be about 90 degrees Fahrenheit before the chickens are put into the hover. During the first week in the hover the chickens should be closely watched lest any of them might get isolated from the heat in a corner of the house distant from the hover. It is a good plan to put a small frame of light boards round the hover for the first week or so. This keeps the chickens from scattering and also prevents floor draughts.

A temperature of 85 to 90 degrees Fahrenheit is usually correct during the first week but the behaviour of the chickens gives a good indication if this is right. If the chickens are seen to huddle together the temperature is too low and if they are inclined to move away from the lamp the temperature is too high. After the first week the temperature can be reduced gradually—usually about 5 degrees per week being suitable. It should be remembered that too high a temperature is just as bad as having the temperature too low. The aim should be to keep the chickens so that they are comfortable.

ANNOUNCEMENTS AND REMINDERS.

GENERAL.

PLOUGHING-UP SUBSIDY.—Farmers who have applied for the subsidy of £2 per acre in respect of old grassland which is to be ploughed, are reminded that payment of the subsidy is now being made. Payments cannot be made, however, in any case until the land has been ploughed, but as the Ministry is anxious to dispatch the money at the earliest possible date any farmer who has the ploughing completed should notify the Ministry immediately. Farmers should, therefore, push ahead with the ploughing, and tell the Ministry when it has been done. The sooner the ploughing is done the sooner will the subsidy be paid.

LICENSING OF BULLS AND BOARS.—Bulls which were calved during the first six months of 1939 must be licensed by the 31st March, 1940. Boars which were farrowed on or before the 30th September, 1939, must be licensed by 31st January, 1940. Applications for licences for both bulls and boars of these ages should be lodged with the Ministry as soon as possible, but not later than 31st December, 1939. In future applications for licences for boars should be made when the animals reach four months old, irrespective of the particular quarter of the year in which they were farrowed. Application forms may be obtained from any Police Barracks, from the County Agricultural Executive Officer, or directly from the Ministry. Farmers keeping unlicensed bulls or boars are liable to prosecution.

PREMIUM BULLS AND BOARS.—Farmers wishing to keep premium bulls and boars in 1940 should apply immediately to their County Agricultural Executive Officer for full particulars of the Schemes under which County Committees of Agriculture award premiums.

ACCREDITED POULTRY FARMS.—Lists giving the names and addresses of the owners of Accredited Poultry Farms for the 1940 season are now available, and will be sent, free, on request. Copies of this list can also be obtained from the County Agricultural Executive Officer, or from the Poultry Instructor for the district.

COUNTY POULTRY STATIONS.—Lists giving the names and addresses of the holders of these stations for the present hatching season may be obtained, free of charge, from the County Executive Officer, or from the local Poultry Instructor.

MANURE SUPPLIES.—Farmers are advised to order their supplies of artificial manures early to avoid delay in spring. Manures at present available include superphosphate, potassic superphosphate, semsol, special potato manure, root manure, and oats and barley manure (the last four mixtures are prepared according to the formulae of the Ministry).

SEED SUPPLIES.—With the increased area under tillage a much greater quantity of seeds will be required this spring than in previous years. Farmers are, therefore, advised to order their requirements of seeds early to make sure of getting the necessary supplies.

REPORT OF THE SEVENTEENTH EGG-LAYING TEST.—Copies of this report are now available, and can be obtained free on request. This report contains full particulars of the performances of the birds which competed at the test which ended last September.

LEAFLETS.—A list of leaflets published by the Ministry is given on the last page of this report. Any of these leaflets can be had from the Ministry, free, on request. A new leaflet dealing with the destruction of rats and rabbits has been prepared, and supplies are now available for distribution. This is leaflet No. 93, and it gives useful information regarding suitable methods of attacking these pests.

POTATOES: GOVERNMENT'S POLICY OUTLINED

Wednesday, 13th December, 1939.

Mr. Boothby (By Private Notice).

MR. BOOTHBY.—To ask the Chancellor of the Duchy of Lancaster, whether he is now in a position to announce the policy of the Government with regard to potatoes.

MR. W. S. MORRISON.—The Government have given careful consideration to the question of ensuring to farmers in the United Kingdom reasonable prices for Ware potatoes of the 1939 crop. At present the trade in Ware potatoes is subject only to the Orders of the Ministry of Food prescribing maximum prices. It is proposed in the near future, after consultation with the interests concerned, to fix minimum prices for the remainder of the season. Maximum prices will also be fixed to enable account to be taken of variations in value due to special quality or proximity to markets. The Government have taken over the regulatory powers of the Potato Marketing Board and propose to watch the situation closely and to exercise those powers as and when required.

It is proposed by means of a tonnage levy, payable by the first buyers, to create an insurance fund which, after the deduction of a small percentage towards the cost of the scheme will be used to ensure to farmers a reasonable return for any surplus crop remaining at the end of the season. No deduction will be made from the growers' price in respect of this levy, which will be added by the first buyer to his price on re-sale. It is not anticipated that the

retail price will be appreciably affected. The details of arrangements on these lines are now being discussed with the interests concerned.

As regards the 1940 crop, the Government have already announced that it is desired, as part of the home food production campaign, to secure a substantial increase in the acreage planted to potatoes next Spring. Minimum prices for that crop will be fixed on the basis of the new 1939 minimum prices with such adjustment as may be necessary to take account of increased costs of production and in relation to yield. As regards the proposed adjustment in relation to yield, it will be appreciated that, if the yield of the crop generally is above normal, farmers should not expect the same tonnage return as if the yield were normal. Similarly, if yield is abnormally low, it would be right to adjust the price per ton upwards. In the event of a surplus, whether resulting from an expansion of acreage, or exceptional yields, the Ministry of Food make the necessary arrangements for ensuring that growers will be enabled to obtain a remunerative return on their potato crop as a whole.

The assurances I have given will apply in respect of all potatoes of the 1940 crop marketed after September 1.

PETROL FOR FARMERS.

The Secretary for Mines has announced that, as from 1st January, 1940, a system of petrol distribution to farmers by coupons will be introduced. The present temporary arrangements which permit the purchase without coupons of motor spirit for agricultural purposes, were made to cover the exceptional requirements of harvest and autumn ploughing, and expire on 31st December. The first period to which the new arrangements will apply will cover the months of January and February, 1940.

The vital importance of increasing the output of produce is fully recognised. While it is necessary that all users of petroleum should exercise the greatest economy, it is not the intention to restrict supplies required for genuine agricultural purposes.

Farmers and others, including ploughing contractors, who require motor spirit for agricultural tractors, stationary engines, or vans and lorries operating on the "F" licence, should apply to Divisional Petroleum Officers on form R (M.S.) 6. Farmers' private motor cars and lorries operating on carriers' licences are not included in this scheme.

Forms can be obtained from local taxation offices or Post Offices at which motor licensing business is transacted. The address of the Divisional Petroleum Officer for the district will be obtainable from the same source as the form.

It is essential, in their own interests, that farmers should complete and post their applications as soon as possible, enclosing the registration books of any registered vehicles.

EIGHTEENTH EGG LAYING TEST AT STORMONT.

SUMMARY OF REPORT COVERING THE FIRST EIGHT WEEKS.

During the first eight weeks, which ended on the 25th November last, 15,843 eggs were laid by the 684 pullets which are under test. Of this number 7,801 were laid during the first four weeks, and 8,042 during the second four weeks. On the basis of the total original number of birds, and making no corrections for deaths, this gives a flock average of 23.16 eggs per bird laid during the eight weeks the test has been in progress. During the corresponding eight weeks of the previous test the average was 21.88 eggs per bird. Of the 8,042 eggs laid during the second four-weekly period, 5,785 or 71.9 per cent. were of 2oz. or over in weight; this compares with 73.51 per cent. in the second period of the previous test.

The Rhode Island Reds in Section 6 maintained during the second period the distinction they had in the first period of leading the sections as regards highest average egg production. Their average during the first period was 15.5 eggs per bird, and during the second period 15.1 eggs per bird. Second place in the sectional averages during both the first and the second periods was taken by the White Wyandottes in Section 2, with an average of 13.9 eggs per bird in each period.

Mrs. Peel's pen No. 16 of White Wyandottes in Section 1 retained its place as the leading pen in the entire test, while the same breeder's pen No. 15 of the same breed, and pen No. 51 of Rhode Island Reds entered by the Marquis of Hamilton, and first in Section 5, tie for second place, only three scoring eggs behind the leading pen. Miss McKee's pen of Rhode Island Reds, which is the leading pen in Section 6, is a good third.

Seven pullets have died during the eight weeks covered by this report, four during the first four-weekly period, and three during the second. This is a mortality rate of 1.02 per cent., which is 0.17 per cent. less than in the previous test.

The scoring of this test differs from that which applied in the last few tests. Formerly only eggs which weighed 2oz. or over at any period of the test were counted for the purpose of determining the placings of the different pens. In this test a maximum of ten eggs per pullet, which are of second grade, i.e. at least 1½oz. but less than 2oz., if laid during the first eight weeks of the test will be added to the total of the eggs weighing 2oz. and over. After the first eight weeks only eggs weighing 2oz. and over will be credited to the score for the purpose of determining placings and awards.

The following are particulars of the leading pens in the different sections at the end of the 8 weeks' period:—

SECTION 1. WHITE WYANDOTTES (Open).

Position	Pen No.	Name and Address of Owner.	Eggs laid				Test Score
			Super Grade	First Grade	Second Grade	Below 2nd Grade	
1	16	Mrs. A. Peel, Oakleigh, Roses Lane Ends, Belfast	58	162	27	1	244
2	15	Mrs. A. Peel, Oakleigh, Roses Lane Ends, Belfast	89	106	69	—	221
3	4	Lt. Col. J. P. Galbraith, Clanabogan, Omagh, Co. Tyrone	43	150	17	—	210

SECTION 2. WHITE WYANDOTTES (Station-holders).

1	26	Mrs. M. M'Bride, Ackinduff, Cabra, Dungannon, Co. Tyrone	34	122	45	1	175
2	28	Mrs. M. J. Veitch, Knockninny, Thompson's Bridge, Co. Fermanagh	18	102	68	1	155
3	27	Miss A. Peel, Aghadalong, Roses Lane Ends, Belfast	25	85	50	1	136

SECTIONS 3 and 4. WHITE LEGHORNS.

1	39	Mrs. M. Noble, Killycramph, Lisnaskea, Co. Fermanagh	34	115	50	—	178
2	44	Mr. J. H. White, The Beeches, Strabane, Co. Tyrone	30	97	67	1	173
3	36	Mrs. G. M. Fulton, Dunravine House, Ballykelly, Co. Derry	14	58	71	1	118

SECTION 5. RHODE ISLAND REDS (Open).

1	51	The Marquis of Hamilton, Baronscourt, Co. Tyrone	67	124	39	1	221
2	48	Mrs. H. Farr, Elsneuk, Dundrum Road, Newcastle, Co. Down	69	99	22	—	190
3	54	Mrs. J. Kirkpatrick, Ballynagashel, Ballymoney, Co. Antrim	14	90	78	12	152

SECTION 6. RHODE ISLAND REDS (Station-holders).

1	74	Miss S. M'Kee, Ardmillan House, Killinchy, Co. Down	39	147	34	—	212
2	67	Mrs. H. H. Dickson, Lower Coagh, Co. Tyrone	79	108	38	—	209
3	76	Mrs. H. Rea, Lisowen, Listooder, Crossgar, Co. Down	18	149	56	1	205

SECTION 7. BUFF ROCKS AND BLACK LEGHORNS.

Position	Pen No.	Name and Address of Owner.	Eggs laid.				Test Score
			Super Grade	First Grade	Second Grade	Below Second Grade	
1	82	Mrs. J. R. Jackson, Fortview, Coleraine, Co. Derry (Buff Rock)	6	126	36	—	162
2	78	Mr. R. Holmes, Killykegan, Coleraine, Co. Derry (Buff Rock)	47	79	77	—	158
3	86	Mr. R. Holmes, Killykegan, Coleraine, Co. Derry (Black Leghorn)	5	112	67	—	152

SECTION 8. OTHER PURE BREEDS.

1	94	Mrs. T. J. M'Laren, Ballykeel, Sixmilecross, Co. Tyrone (Light Sussex)	40	119	23	—	174
2	92	Miss M. A. Lawson, Roundhill House, Strabane, Co. Tyrone (Light Sussex)	27	119	46	1	172
3	101	Miss J. Toal, Finnard, Ardaragh, Newry, Co. Down (Barred Rock)	20	95	64	2	158

SECTION 9. POULTRY CLUBS AND YOUNG FARMERS' CLUBS.

1	115	Ballygawley Poultry Club, Co. Tyrone (Rhode Island Red)	14	113	71	1	155
2	119	Portadown Poultry Club, Co. Armagh (Rhode Island Red)	19	101	65	4	153
3	111	Greyabbey and District Poultry Club, Co. Down (White Wyandotte)	22	99	12	—	133

AGRICULTURAL INDEX NUMBERS.

MONTHLY INDEX NUMBERS OF PRICES OF INDIVIDUAL COMMODITIES.

(Corrected for Seasonal Variation).

(Base 1927-29 = 100).

Commodity	1939				1938	1937
	November	October	September	August	November	November
Cattle : Fat ...	92	92	87	81	78	92
Store ...	95	98	95	89	89	92
Cows : Fat ...	76	82	69	67	64	75
Sheep and Lambs : Fat ...	58	69	66	50	44	82
Bacon Pigs ...	*	*	88†	78	94	96
Hens and Chickens	74	70	71	68	69	75
Ducks ...	90	98	91	92	95	85
Turkeys ...	83	—	—	—	66	85
Eggs ...	103	93	108	101	84	86
Milk :						
For Manufacture	*	97	93	87	86	95
Whole ...	125	120	109	117	114	112
All ...	*	104	98	94	99	102
Farmers' Butter ...	88	87	87	80	74	90
Potatoes ...	98	103	101	71	77	78
Oats ...	126	112	83	61	72	93
Hay ...	127	128	107	91	78	81
Oat Straw ...	123	112	86	84	90	91
Flax ...	108	—	—	—	75	76
Grass Seed :						
Perennial ...	89	102	99	113	125	54
Italian ...	136	127	102	96	104	34
Mixed ...	142	131	99	133	93	43
All ...	127	118	97	113	117	45

Revised Index Numbers taking Account of Payments under the Cattle Subsidy, and Government Payments for Milk.

Cattle : Fat ...	105	106	100†	94	91	105
Milk :						
For Manufacture	*	122	111	108	115	107
All ...	*	122	111	110	115	109

†Provisional.

*Not yet available.

‡Revised.

MONTHLY INDEX NUMBERS OF PRICES OF INDIVIDUAL COMMODITIES.
 (Uncorrected for Seasonal Variation).
 (Base 1927-29 = 100).

Commodity	1939				1938	1937
	November	October	September	August	November	November
Cattle : Fat ...	83	82	82	80	70	82
Store ...	92	96	95	91	87	89
Cows : Fat ...	70	76	65	64	60	70
Sheep and Lambs : Fat ...	54	61	59	45	40	73
Bacon Pigs ...	*	*	84†	77	84	86
Hens and Chickens	69	65	66	61	65	71
Ducks ...	88	96	88	91	95	84
Turkeys ...	94	—	—	—	75	97
Eggs ...	173	135	122	103	143	146
Milk :						
For Manufacture	*	97	88	77	90	100
Whole ...	131	121	104	104	121	121
All ...	*	104	92	84	104	109
Farmers' Butter ...	92	86	83	74	76	91
Potatoes ...	93	101	104	82	73	75
Oats ...	116	100	79	69	66	85
Hay ...	123	124	103	90	75	78
Oat Straw ...	122	110	88	84	89	90
Flax ...	111	—	—	—	76	80
Grass Seed :						
Perennial ...	93	102	93	93	123	53
Italian ...	141	124	83	88	100	34
Mixed ...	140	127	97	109	86	41
All ...	130	114	90	96	113	44

Revised Index Numbers taking Account of Payments under the Cattle Subsidy, and Government Payments for Milk.

Cattle : Fat ...	95	95	94†	93	82	94
Milk :						
For Manufacture	*	122	105	96	120	113
All ...	*	121	104	98	120	117

†Provisional.

*Not yet available.

†Revised.

PRICES USED IN THE CALCULATION OF THE INDEX NUMBERS.

Commodity	1927-29	1939				1938	1937
		Nov.	Oct.	Sept.	Aug.	Nov.	Nov.
	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.	s. d.
Cattle :							
Fat, per live cwt. ...	45 2	37 5	37 3	36 11	36 3	31 7	37 3
Store, per head	223 7	204 6	214 1	211 10	202 11	194 1	199 7
Cows :							
Fat, per head	336 10	237 0	256 3	219 3	215 5	200 8	234 5
Sheep and Lambs :							
Fat, per head	53 6	28 8	32 5	31 9	24 2	21 5	39 1
Bacon Pigs :							
per dead cwt.	78 8	*	*	66 4†	60 3	66 1	67 4
Hens & Chickens							
per head ...	3 0½	2 1¼	1 11½	2 0¼	1 10½	1 11¾	2 2
Ducks, per head	2 6½	2 3	2 5¼	2 3	2 3¾	2 5	2 1½
Turkeys, per head	15 7½	14 8½	—	—	—	11 8	15 2
Eggs, per 120 ...	13 6	23 3	18 2	16 6	13 11	19 2	19 8
Milk :							
For Manufacture, per gal.	0 6¼	*	0 6	0 5½	0 4¾	0 5¾	0 6¼
Whole, per gal.	1 0	1 3¾	1 2½	1 0½	1 0½	1 2½	1 2½
Farmers' Butter,							
per lb. ...	1 5½	1 4	1 3	1 2½	1 1	1 1¼	1 4
Potatoes, per cwt.	3 5	3 2	3 5	3 6	2 9	2 6	2 7
Oats, per cwt.	8 1	9 5	8 1	6 5	5 7	5 4	6 10
Hay, per ton ...	73 8	90 6	91 1	76 1	66 3	55 1	57 7
Oat Straw :							
per ton ...	47 6	57 9	52 3	41 10	39 9	42 2	42 8
Flax, per stone	12 3	13 7	—	—	—	9 3	9 9
Grass Seed :							
Perennial,							
per cwt. ...	16 9	15 7	17 1	15 7	15 8	20 6	8 11
Italian, per cwt.	22 7	31 9	28 0	18 9	20 0	22 8	7 8
Mixed, per cwt.	15 11	22 4	20 3	15 5	17 5	13 8	6 6

†Provisional. *Not yet available.

MINISTRY OF LABOUR RETAIL PRICES AND INDICES.

The Ministry of Labour general index of retail prices of food in Great Britain and Northern Ireland, at November 1st, was 54 per cent. above the level of July, 1914, as compared with 50 per cent. at September 30th, and 40 per cent. at November 1st, 1938. During October there was an increase in the retail prices of bacon, and a seasonal rise in the prices of eggs. There were also slight upward movements, on average, in the retail prices of cheese, butter, tea, meat, potatoes and milk. On the other hand there was a reduction in the prices of fish (which had risen sharply in September), and the price of margarine showed some decline, on average, as a result of the introduction of a standard blend at 6d. per lb. There was little change during October in the prices of flour, bread and sugar. As a result of certain increases, the average level of retail prices was approximately $2\frac{1}{2}$ per cent. higher at November 1st than at the beginning of the month.

The following table shows the average retail prices of certain foods in large towns and villages, on November 1st, 1939, September 30th, 1939, and November 1st, 1938.

Article	Nov. 1, 1939	Sept. 30, 1939	Nov. 1, 1938	Increase over July, 1914.		
				Nov. 1, 1939	Sept. 30, 1939	Nov. 1, 1938
	per lb.	per lb.	per lb.	per cent.	per cent.	per cent.
Beef, British—	s. d.	s. d.	s. d.			
Ribs ...	1 3	1 2 $\frac{3}{4}$	1 2 $\frac{1}{2}$	50	48	43
Thin Flank ...	0 8 $\frac{1}{4}$	0 8	0 7 $\frac{1}{2}$	23	20	13
Beef, Chilled or Frozen—						
Ribs ...	0 10 $\frac{1}{2}$	0 10	0 9 $\frac{1}{2}$	42	38	31
Thin Flank ...	0 5 $\frac{1}{2}$	0 5 $\frac{1}{4}$	0 5	12	7	— 3
Mutton, British—						
Legs ...	1 4	1 4	1 3 $\frac{1}{4}$	55	53	43
Breast ...	0 8	0 7 $\frac{3}{4}$	0 7 $\frac{1}{2}$	24	20	13
Mutton, Frozen—						
Legs ...	0 11	0 10 $\frac{3}{4}$	0 10 $\frac{1}{2}$	60	56	55
Breast ...	0 4 $\frac{1}{2}$	0 4 $\frac{1}{4}$	0 4	10	4	— 6
Bacon (Streaky) ...	1 6 $\frac{1}{2}$	1 4 $\frac{1}{2}$	1 3 $\frac{1}{2}$	65	47	38
Butter—						
Fresh ...	1 6 $\frac{3}{4}$	1 6 $\frac{1}{2}$	1 4 $\frac{1}{2}$	29	27	10
Salt ...	1 6 $\frac{3}{4}$	1 6	1 3 $\frac{1}{4}$	31	27	6
Cheese ...	0 11	0 10 $\frac{1}{2}$	0 10 $\frac{1}{4}$	26	21	24
	Per Qt.	Per Qt.	Per Qt.			
Milk ...	0 7	0 6 $\frac{3}{4}$	0 7	98	94	91
	each	each	each			
Eggs (Fresh) ...	0 2 $\frac{1}{2}$	0 2 $\frac{1}{4}$	0 2 $\frac{1}{2}$	110	88	100
	Per 4 lb.	Per 4 lb.	Per 4 lb.			
Bread ...	0 8 $\frac{1}{2}$	0 8 $\frac{1}{2}$	0 8 $\frac{1}{2}$	46	45	47
	Per 7 lb.	Per 7 lb.	Per 7 lb.			
Flour ...	1 1 $\frac{3}{4}$	1 1 $\frac{3}{4}$	1 2 $\frac{1}{4}$	30	30	33
Potatoes ...	0 6 $\frac{1}{4}$	0 6 $\frac{1}{2}$	0 5 $\frac{1}{2}$	38	35	24

The cost of maintaining unchanged the pre-Great War standard of living of working-class families at November 1st, was approximately 69 per cent. over the level of July, 1914, as compared with 65 per cent. at September 30th, and 56 per cent. at November 1st, 1938.

PRICES OF FERTILISERS AT SPECIFIED CENTRES.

The following table shows the retail cash prices per ton of Fertilisers at 1st December, 1939, at representative centres in Northern Ireland.

	Belfast		London-derry		Antrim		Armagh		Bally-clare		Ballymena		Coleraine		Dungannon		Enniskillen		Omagh		Strabane	
	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.	£	s. d.
Nitrogenous Manures :																						
Nitrate of Soda (15.5% N.)	8	10 0	—	—	9	5 0	—	—	—	—	9	10 0	—	—	—	—	—	—	—	—	—	—
Sulphate of Ammonia (20.6% N.)	8	10 0	—	—	9	2 6	—	—	—	—	9	0 0	—	—	—	—	9	0 0	8	17 6	9	0 0
Nitro Chalk (15.5% N.)	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Phosphatic Manures :																						
Superphosphate (16% S.P.A.)	3	16 3	4	2 6	4	7 6	—	—	4	0 0	4	0 0	4	0 0	—	—	4	12 6	4	10 0	4	5 0
Semsol (5% S.P.A., 15½% P.A.)	3	0 0	3	6 3	3	15 0	3	10 0	3	7 6	3	10 0	3	7 6	—	—	3	15 6	3	10 0	3	10 0
*Basic Slag (16% to 17% P.A.)	2	18 0	2	18 0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
*Basic Slag (18% to 20% P.A.)	3	6 0	3	6 0	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—	—
Gafsa Rock Phosphate (26% P.A.)	2	12 6	2	18 9	3	10 0	3	2 6	3	0 0	3	5 0	3	0 0	—	—	3	7 6	3	2 6	2	15 0
Potash Manures :																						
Kainit (14% P.)	4	15 0	5	17 6	—	—	—	—	5	5 0	5	5 0	—	—	—	—	—	—	4	17 6	—	—
Potash Salts (20% P.)	5	16 0	—	—	—	—	—	—	6	5 0	6	6 0	—	—	—	—	—	—	6	2 6	—	—
Potash Salts (30% P.)	6	15 0	6	17 6	7	10 0	—	—	7	5 0	7	5 0	—	—	—	—	—	—	7	5 0	—	—
Muriate of Potash (50% P.)	10	0 0	10	7 6	10	15 0	—	—	10	10 0	10	10 0	—	—	—	—	—	—	10	15 0	10	0 0
Agricultural Salt	—	—	—	—	—	—	—	—	—	—	—	—	—	—	3	5 0	2	10 0	—	—	3	0 0

Abbreviations : N.—Nitrogen.

S.P.A.—Soluble Phosphoric Acid.

P.A.—Phosphoric Acid.

P.—Potash.

* If obtained under the Land Fertility Scheme, the price of British made basic slag will be 25 per cent. less than the figures quoted, since a subsidy equivalent to one-quarter is payable. The prices for British basic slag, c.i.f. Belfast and Londonderry, are fixed by the Land Fertility Committee, and are the same at both these ports. The retail prices at Belfast and Londonderry given above are based on these c.i.f. prices plus the charges approved by the Committee for unloading and distribution. The cost at other centres can be ascertained by adding the cost of carriage from the port to the prices at Belfast or Londonderry.

TRADE AND PRICES OF LIVE STOCK AT BELFAST AUCTION MARTS.

The offerings of fat cattle at the Belfast Auction Marts last month were again of mixed quality but after the first week of November the demand showed a marked seasonal improvement and quotations, while fluctuating widely, moved to higher levels and the average price per live cwt. was 1/5d. higher than the October figure at 38/9d. The general range of prices throughout last month was: top quality and super grade animals 37/6d. to 46/-; good commercial types, 36/- to 42/6d. and rougher and unfinished cattle 34/- to 40/- per cwt. live weight.

The following table shows the weekly average prices per live cwt. for fat cattle last month compared with those ruling at the corresponding dates in 1938:—

<i>Week ended</i>	<i>per cwt.</i>	<i>Week ended</i>	<i>per cwt.</i>
	<i>s. d.</i>		<i>s. d.</i>
11th November, 1939 ...	36 2	12th November, 1938 ...	31 11
18th " " ...	38 0	19th " " ...	32 11
25th " " ...	39 10	26th " " ...	33 7
2nd December, " ...	40 4	3rd December, " ...	34 1
Average for Month ...	38 9	Average for Month ...	32 11

Fat cows and bulls continued in ready demand at higher prices: of from 20/- to 35/- per live cwt.

The majority of the store cattle at the saleyards last month were of moderate quality and although the demand was quiet in the earlier part of the month it improved later when strong stores in particular fetched higher rates. The general price ranges of store cattle during November were:— large forward stores, £13 to £16 10s. 0d. per head; six-quarter-olds, £11 10s. 0d. to £14 10s. 0d.; twelve to fifteen month olds, £9 to £12 10s. 0d., and calves and weanlings £5 10s. 0d. to £10 10s. 0d.

Fat sheep and lambs were in firm demand throughout the month and with shippers and local buyers competing freely prices had a slight but steady upward trend. The estimated prices per lb. dressed carcase weight ranged from 7½d. to 10d. for lambs and from 4d. to 7½d. for ewes, according to breed and quality.

The weekly ranges of prices for fat cows, store cattle, dairy cattle and fat sheep and lambs are shown in the following table on page 512.

PRICES OF OTHER STOCK AT THE BELFAST AUCTION MARTS.

Description.	Week ended 11-11-39	Week ended 18-11-39	Week ended 25-11-39	Week ended 2-12-39
Fat Cows ...				
Range of 1st quality	£14 to £22-10	£15 to £22-10	£16 to £22-15	£17 to £27-5
2nd "	£11 to £16	£11 to £17	£11 to £17	£12 to £19
Store Cattle :				
Large Forward Stores ...				
Range of 1st quality	£14-10 to £16	£15 to £16-17-6	£11-5 to £16-10	£14-10 to £16-10
2nd "	£12 to £14	£12-15 to £14-10	£7 to £14	£12-15 to £14
Younger Stores ...				
Range of 1st quality	£9 to £11-10	£10-10 to £12-10	£10 to £11-10	£10-10 to £12
2nd "	£7 to £9	£7-15 to £10	£8 to £9-10	£8 to £10
Dairy Cattle :				
Milch Cows ...				
Range of 1st quality	£24 to £31-10	£24 to £31	£24 to £34	£25 to £33
2nd "	£19 to £22	£19 to £22	£19 to £22	£20 to £24
Springers ...				
Range of 1st quality	£22 to £27-10	£23 to £29	£21 to £24-10	£24 to £29
2nd "	£18 to £21	£18 to £21	£18 to £20	£20 to £23
Sheep and Lambs :				
Crossbred & White Ewes				
Range of 1st quality	30/- to 40/-	30/- to 46/-	32/- to 46/6	35/- to 44/-
2nd "	24/- to 32/-	25/- to 39/-	25/- to 39/-	26/- to 39/-
Blackface Ewes ...				
1st "	22/- to 35/-	24/- to 34/-	23/- to 32/6	24/6 to 36/-
2nd "	16/- to 28/-	20/- to 27/-	18/- to 26/-	19/- to 29/-
Crossbred & White Lambs				
1st "	32/- to 46/-	34/- to 44/6	35/- to 50/-	36/- to 51/-
2nd "	24/- to 37/-	22/- to 36/-	25/- to 39/-	28/- to 39/-
Blackface Lambs ...				
1st "	18/- to 25/-	18/- to 23/-	18/- to 25/-	18/- to 25/6
2nd "	13/- to 19/-	13/- to 19/6	12/- to 19/-	11/- to 20/-
Rams ...				
1st "	28/- to 50/-	32/- to 44/-	38/- to 45/-	37/- to 47/-
2nd "	25/- to 42/-	25/- to 37/-	32/- to 39/-	32/- to 41/-

TRADE AND PRICES OF LIVE STOCK AT FAIRS.

The offerings of store cattle at fairs held during November met a dull trade but the demand for forward animals showed an improvement during the month and at the close a firmer tone prevailed. Young and inferior types of cattle, however, remained in dull request. Quotations for strong polly bullocks for short keep and good types of breeding heifers firmed during the month but other sorts continued to ease in price.

The demand for fat cattle at these fairs was somewhat variable but in the latter part of the month a good local demand was generally evident and on balance prices had a seasonal upward trend. The condition and quality of most of the animals was good but towards the end of the month some of the cattle were shown in a thin condition. Well finished young cattle weighing from 8 to 10 cwt. remained in best demand throughout the month.

Dairy cattle continued in very firm request all month and provided the brightest feature of the livestock industry. Springing cows and heifers showing promise of good milking qualities and the best young milch cows, for shipment to Great Britain were in keenest request and prices generally showed a further increase on the month.

At most fairs little interest was evinced in the sheep and lamb section but fat animals continued to sell fairly readily at around previous quotations whilst at some centres the best breeding ewes and store lambs were also in fair request at current rates.

Trade for young pigs was quite brisk but with the usual feeding meals very limited in supply some of the larger feeders were becoming more cautious in increasing their stocks. Good clearances were generally made and prices when altered were firmer. The offerings of brood sows were of variable quality and while the best types sold readily at late rates of from £6 to £11 10s. 0d. per head inferior animals were difficult to cash.

PRICES OF LIVE STOCK.

Average prices of Live Stock at Fairs during the month of November, 1939.

Date	Fair	Calves (under 9 months)		Store Cattle		Fat Cattle (18 months and over)		Springers		Milch Cows		Fat Lambs (under 12 months)		Breeding Ewes		Young Pigs	
		Per head £ s.	Per cwt. Live weight	Per cwt. Live weight	Per cwt. Live weight	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.	Per head £ s.
1	Londonderry	—	33/6 to 38/6	—	—	16 15	—	—	—	—	—	—	—	—	—	—	—
1	Rathfriland	6 16	36/- to 41/6	36/-	—	19 0	18 0	—	—	—	—	—	—	—	—	—	—
2	Ballymoney	7 6/9	35/- to 39/-	—	—	22 10	20 15	—	—	—	—	—	—	—	—	—	—
3	Moy	—	33/- to 38/-	35/-	—	18 10	16 10	—	—	—	—	—	—	—	—	—	—
7	Omagh	6 19/3	39/- to 41/-	34/6	—	17 0	16 10	—	—	—	—	—	—	—	—	—	—
8	Crossgar	—	36/- to 38/-	—	—	22 0	—	—	—	—	—	—	—	—	—	—	—
8	Irvinestown	6 8	34/6 to 38/6	34/-	—	16 0	14 15	—	—	—	—	—	—	—	—	—	—
8	Kilrea	5 8/3	37/- to 43/-	36/-	—	19 0	18 0	—	—	—	—	—	—	—	—	—	—
10	Ballygawley	—	28/- to 41/-	34/-	—	16 10	—	—	—	—	—	—	—	—	—	—	—
10	Enniskillen	6 0/6	31/- to 37/-	33/6	—	17 0	15 0	—	—	—	—	—	—	—	—	—	—
13	Strabane	6 5	35/6 to 37/-	34/-	—	15 0	—	—	—	—	—	—	—	—	—	—	—
15	Lisnaskea	6 5	30/- to 35/-	35/-	—	17 0	16 0	—	—	—	—	—	—	—	—	—	—
16	Ballynahinch	—	38/- to 40/-	—	—	21 10	22 0	—	—	—	—	—	—	—	—	—	—
18	Portadown	6 6/9	36/- to 39/-	39/-	—	22 0	20 0	—	—	—	—	—	—	—	—	—	—
20	Camlough	6 0	38/- to 43/-	37/-	—	18 10	17 10	—	—	—	—	—	—	—	—	—	—
21	Money more	6 18/6	37/- to 40/-	35/6	—	20 10	18 0	—	—	—	—	—	—	—	—	—	—
22	Fintona	6 12	39/- to 41/-	36/-	—	18 0	17 0	—	—	—	—	—	—	—	—	—	—
24	Castlederg	6 5	35/- to 37/6	37/6	—	15 0	—	—	—	—	—	—	—	—	—	—	—
24	Killylea	—	31/- to 43/6	39/-	—	21 0	—	—	—	—	—	—	—	—	—	—	—
25	Ballymena	7 0	32/- to 41/-	—	—	25 0	22 10	—	—	—	—	—	—	—	—	—	—
27	Banbridge	5 15/6	34/- to 39/-	38/-	—	19 10	16 0	—	—	—	—	—	—	—	—	—	—
30	Antrim	5 16/6	34/6 to 41/-	39/-	—	24 0	21 10	—	—	—	—	—	—	—	—	—	—

* Long Wools.

† Downs and Crossbred.

‡ Mountain.

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